ROCKS AND MINERALS

Mineralogy
•
Geology
•
Lapidary

CALCITE—A BUTTERFLY TWIN CRYSTAL FROM MEXICO
Crystal [illegible] in size
Ben N. Pinkney, Jr., Collection

60c

May-June, 1958
Whole Number 264

ROCKS & MINERALS

PETER ZODAC, Editor and Publisher
America's Oldest and Most Versatile Magazine for the Mineralogist, Geologist, Lapidary.

Published Bi-Monthly

OFFICIAL JOURNAL

ROCKS & MINERALS ASSOCIATION

WHOLE NO. 264 VOL. 33, Nos. 5-6 MAY-JUNE, 1958

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DEPARTMENTS

MISCELLANEOUS

Entered as second-class matter September 13, 1926, at the Post Office at Peekskill, N. Y. under the Act of March 3, 1879.

Title registered in U. S. Patent Office.

Specially written articles (as contributions) are desired.
Subscription price $3.00 a year; Current numbers, 60¢ a copy. No responsibility is assumed for subscriptions paid to agents and it is best to remit direct to the Publisher.
Issued bi-monthly on the 20th of the even months.
Authors alone are responsible for statements made and opinions expressed in their respective articles.

ROCKS and MINERALS, BOX 29, PEEKSKILL, N. Y., U.S.A.
(Office — 157 WELLS STREET — Tele. Peekskill 7-3185)

CHIPS FROM THE QUARRY

Coming Events

May 1-4, 1958—National Gem & Mineral Show of the Texas Federation of Mineral Societies and the American Federation of Mineralogical Societies. Dallas Gem & Mineral Society, will be host. Women's Bldg., State Fair Grounds, Dallas, Texas. For particulars contact Dwight Halstead, General Show Chairman, 4728 Westchester Mall, Dallas 19, Texas.

May 5 and 6—Arrowhead Mineral Club. Annual Mineral and Artifact Show. DeMolay Memorial Building, 801 Second Avenue North, Great Falls, Montana. Annual Banquet, May 6, same place. Donald E. Porter, Show Director, P.O. Box 256, Great Falls, Montana.

June 19, 20 and 21—Midwest Federation of Mineralogical and Geological Societies 1958 Convention and Show, Downers Grove Community High School, Downers Grove, Illinois. Earth Science Club of Northern Illinois, host. 4729 Prince Street, Downers Grove, Illinois.

July 26 and 27—Del Norte Rockhounds Gem and Mineral Show, Fairgrounds Pavilion, Crescent City, Calif. 26th: 10 A.M.-10 P.M.; 27th: 10 A.M.-6 P.M. Free admission. Gertrude C. Penn, Publicity, 875 "L" St., Crescent City, Calif.

Aug. 7, 8, 9, 1958—Eastern Federation of Mineralogical and Lapidary Societies Convention. City Auditorium, Asheville, N.C. For particulars contact Fred M. Allen, Jr., Box 501, Lincolnton, N.C.

October 4 and 5—Humboldt Gem & Mineral Society will hold its Fifth Annual Show at the Redwood Acres Fair Grounds, Eureka, Calif., Saturday, 10 A.M. to 10 P.M. the 4th, and 10 A.M. to 6 P.M. Sunday the 5th. Mrs. A. D. Pettingill, Publicity Chairman, Box 1075, Eureka, Calif.

Photo on the cover

The photo on the cover of this issue was sent in by Reo N. Pickens, Jr., 610 N. Martin, Waukegan, Ill. Mr. Pickens is a photographer whose specialty is photos of minerals in color. The photo is of a beautiful butterfly twin crystal of calcite, ⅝"x⅝" in size—its locality is Mexico. There are copper inclusions in the base crystals.

16th Annual Agate Show

The North Lincoln Agate Society will hold its 16th annual agate show Saturday and Sunday, July 26th and 27th, in the DeLake Grade School on Hi-Way 101 just north of D river in Delake, Oregon.

Doors will be open on Saturday from 10 A.M. until 10 P.M. and on Sunday from 10 A.M. until 5 P.M. Every visitor will receive free a beach agate as a souvenir of the 1958 show.

The show will feature collections of amateur and commercial exhibitors, and will include not only agates and minerals from Lincoln County beaches, but also specimens from all over the world. Members of other agate and mineral societies throughout the Northwest have been invited to bring displays.

Hazel Lacey, Box 72,
Oceanlake, Oregon

COMING

Special North Carolina Number

The July-August 1958 issue of R&M will be a Special North Carolina number as a tribute to the Eastern Federation of Mineralogical and Lapidary Societies Convention which will be held in Asheville, N.C. Aug. 7, 8, 9. From all reports the convention will be the largest ever held in the East and we want to give it an additional boost with a Special Issue of R&M.

Dealers who plan to have booths at the convention are urged to run ads in the Special N.C. Issue—dealers who may not take in the convention, and especially those handling minerals, should join the convention in spirit by featuring N.C. minerals in their ads.

Let us all get behind the coming convention and really give it a big boost!

ROCKS AND MINERALS will have Booth 33 at the convention and the Editor would be very happy to greet any friends who may be in attendance.

WORLD NEWS ON Mineral Occurrences

ITEMS ON NEW FINDS ARE DESIRED
PLEASE SEND THEM IN.

Abbreviations: xl—crystal xled—crystallized xline—crystalline
fl—fluoresces ph—phosphoresces

ALABAMA—"Graphite altho not a showy mineral has been mined quite extensively in Clay County, Alabama, from one end to the other. It is quite interesting to visit these old abandoned mines and see the skeletons of a once prosperous business.

"Around Ashland, Clay Co.. Ala., are some half dozen abandoned graphite mines that had been worked by the Alabama Graphite Co."—note sent in by James Miller Davis, 212 Guaranty Savings Bldg., Montgomery, Ala.

ARIZONA—"Am sending by parcel post a few specimens from this part of Arizona. I have never seen anything in R&M about this part of the country."—letter dated Nov. 12, 1957, from R.L. Oliver, Box 111, Oracle, Ariz.

The following specimens were received from Mr. Oliver:

Chrysocolla: A beautiful specimen consisting of bluish chrysocolla and greenish malachite. From San Manuel Mine, San Manuel, Arizona.

Tourmaline: Mass of black tourmaline xls in massive milky quartz. From Catalina Mts., near Oracle, Pinal Co., Ariz.

Wulfenite: Orange-yellow wulfenite xls with drusy rock xls in a dark brown limonite matrix. "From a claim I own about 20 miles S.E. of Oracle, Ariz., Catalina Mts., Coronado Nat. Forest."—on label.

ARKANSAS—Brown jasper pebbles have been found in a creek bed near Benton, Saline Co., Ark.

CALIFORNIA—G.H. Haldén, 270 Lewis Ave., Millbrae, Calif., sent in an interesting item. It reads:

"The specimen to be described was collected during April 1952, by Mr. Ralph Lawn, who at the time was a member of the group, that for the past seven years has met weekly at my home for the purpose of studying minerals.

"The specimen, as received, consisted of a nearly round, somewhat knobly Roemerite stalactite, 5¾ in. long and tapering from ⅝ x ½" to $^5/_{16}$ x $^5/_{16}$". It was of a rusty, dark reddish-brown color and a wet, oily appearance.

'It was found pendant from a projection on the wall of a tunnel in the Stayton Mine, Lone Tree, two miles south of Antimony Peak. near Hollister, San Benito County, California.

While it might sound like exaggeration when saying, that it, when received, was oozing with sulphuric acid; the fact remains, that the moist surface gave a strong acid reaction with dry, blue litmus paper.

Thin slices could with ease be cut off the specimen, as it was as soft as cold butter; the interior was equally soft, but porous and granular, with the minute interstices filled with strongly acid ooze.

The only constituents found were ferrous and ferric iron, sulphuric acid and water.

As it could not be stored conveniently in its moist condition, the specimen was left for more than a year in a large,

open test tube, where it dried sufficiently to permit it being wrapped in cellophane.

It has, by now, acquired a dull, earthy luster and a medium brownish-yellow color; but, though shrunken slightly, it has nearly retained its original shape.

The Stayton Mine is principally a quicksilver mine, yielding cinnabar and native mercury. It has also furnished nice specimens of stibnite crystals and of massive yellowish-white crusts of stibiconite, a hydrous antimony oxide."

COLORADO—"The micro hunter can do well almost within the city limits of Silverton (San Juan Co.), Colo. On the side of Anvil Mt. is the Coming Wonder Mine, on a contact of the Sultan Mt. monzonite stock and the Red Mountain Range. The dump yields cubes of fluorite (white and green); good micros of huebnerite, a somewhat rare tungsten mineral; clear quartz xls; and sphalerite xls.

"Sometimes a small vug will contain all the above, and I almost forgot, pyrite xls. On Sultan Mt. the dumps yield the same thing, tho you might have to turn over some big rocks to expose a vug."—note sent in by Pat Fancher, Box 63, Ouray, Colo.

CONNECTICUT—"I am sending you under separate cover a number of minerals collected along the new Thru-way between Byram and old Greenwich, Conn. I hope you may assist me in identifying these specimens, none of which are spectacular, but which seem to me to be interesting."—letter dated Nov. 19, 1957, from William J. Kadlec, 42 Terrace Ave., Riverside, Conn.

The following minerals were received:

Biotite: black, radiating plates on massive smoky quartz.

Calcite: white, cleavable (fl. yellow-long wave) on mica schist.

Cyanite: grayish (blue tinge) mass with massive smoky quartz.

Fluorite: tiny brownish fluorite cubes, tiny brassy-yellow pyrite cubes, small brownish stilbite xls in dark gray mica schist.

Garnet: massive pale pink; also red in gray mica schist.

Gypsum (*selenite*): white encrustation on dark gray (stained brown) mica schist.

Pyrite: Brassy-yellow masses, some showing striated faces, with dark bronzy-brown biotite in massive smoky quartz.

Byram and Old Greenwich are in the S.W. tip of Fairfield Co., Conn.

.....

"In the late summer of 1956 I was rock hunting with my father, and some friends, at Gillette Quarry, Haddam Neck, Conn. While going over the old dump near the river (the mine is near the east bank of the Connecticut River) I found a clear 3¾x 2 inch smoky quartz xl.

"Several months later my father found an extremely nice topaz xl and a pink beryl xl."—letter dated Feb. 15, 1958, from Robert Gallant, Jr., Box 32, Moodus, Conn.

DELAWARE—In a large excavation along the right hand side of U.S. 40, in New Castle Co., Del., 2 miles west of the city of New Castle, black pebbles of basanite have been found by the conductor of this department.

FLORIDA—Chalcedony pseudo coral, rough but interesting grayish masses stained brown by clay, have been sent us by Ralph Wayman of Moody Air Force Base, Georgia. The masses were found as float material on the Withlacoochee River, Madison Co., Fla. (just over the Georgia State Line.) See Georgia, below.

GEORGIA—"I am sending under separate cover some hematite and limonite from the Paleocene Clayton formation in southwest Georgia. These are from the Providence Canyons (Little Grand Canyons), Stewart Co., Ga., near Lumpkin. I have also found here some botryoidal hematite. Some of this is mined as low grade iron ore in open pit operations near the canyons. The area is very colorful and is located 3 or

4 miles west of Lumpkin on a dirt road. The dirt roads are not marked well in the area, and probably local inquiry would save time. After a heavy rain, these dirt (clayey) roads can get quite slippery. There are several springs at the bottom of the canyons, but it is necessary to carry your own drinking water. Near the springs are deposits of kaolin clay of several colors. A good deal of this section of Georgia is red clay. I am enclosing a map of the general area.

"Another collecting area near here is in Madison Co., Fla., just across the state line (Withlacoochee River). I am sending a few specimens which I picked up (see Florida, above). The Georgia side of the river is limestone bluffs and the Florida side is a rolling area. On this area, specimens like I am sending can be picked up as float material. I did a little digging but didn't come up with anything except a small crystal. Sometimes the river floods part of the collecting area.

"I have never heard of anything being found here at Valdosta except an ancient coral replaced by chalcedony, which is now in the State Museum in Atlanta, Ga.

"Another south Georgia area of interest is the Kolomoki Mounds State Park, about 6 miles north of Blakely, Early Co., Ga. I don't know anything about it except that it is an Indian burying ground. The Indians which inhabited south and central Georgia and Alabama were the Creeks.

"Possibly you can use some of this material in 'World News on Mineral Occurrences'. At any rate I am happy to write and send you these specimens. I think R&M covers the field very well, for beginners to advanced collectors."—letter dated Jan. 17, 1958, from A/1c Ralph Wayman, 3554th C.C.T. (Supp.) Box 130, Moody AFB, Valdosta, Ga.

The specimens from Providence Canyons are rough, cellular but attractive masses consisting of reddish hematite and brownish limonite.

IDAHO—"About 22 road miles northeast of Bonners Ferry (Boundary Co.), Idaho, is located the old Buckhorn mine. The mine was brought to my attention by Jim Thompson of the Bonners Ferry Ranger Station. The mine is located several hundred feet below the top of Buckhorn ridge. A jeep road connects the mine with the Deer Creek road #435. It is approximately 4 miles from this forest service road.

"Three drifts have penetrated pre-Cambrian sediments of the Belt series to expose quartz veins.

"Iron pyrite is the only conspicuous metal-bearing mineral on the dumps. Pyrite occurs as isolated grains and bunches and in a large number of specimens the pyrite is crystallized. These crystals, commonly in a colorless quartz gangue, generally range in size from microscopic cubes to striated cubes ½ inch in diameter. Galena was noted as traces in but few specimens. Some unweathered light brown siderite was also observed. It is reported that lead was the chief product of this mine which has been idle for a great many years and most of the mine and mill buildings have fallen into ruin.

"Those not caring to hike to the mine dumps high on the mountain slope, may collect massive pyrite at the old mill site just south of Mill Creek on the Deer Creek Road.

"This property for its pyrite crystal occurrence warrants the attention of local rock hounds."—letter recently received from Gerald Navratil, RFD 2, Box 70, Middleburgh, N.Y. (Mr. Navratil, a forest ranger, visited the locality last summer).

ILLINOIS—Small black smoky quartz xls in purplish fluorite have been found at the fluorite mines in Rosiclare, Hardin Co., Ill.

INDIANA—From a gravel pit near Fortville, Ind., we have an interesting specimen—a purplish mass of amethyst (one face polished). It was collected, polished, and sent to us by Harold S.

Johansen, prop. of Dromo Sales Co., Rt. 5, Box 229, Noblesville, Ind. Fortville is in N.W. Hancock County, near the Hamilton County line; the gravel pit is close by, just over the line in Hamilton County.

"For your World News department I am sending you an amethyst quartz. I am also finding an occasional piece of that agate-like material recently sent you; and I have found a couple pieces of Minnesota type agate."—letter dated Sept. 9, 1957, from Mr. Johansen. (Mr. Johansen has for sale many good Indiana minerals, including gold bearing sand).

IOWA—Michael Papcun, RR 1, Melrose, Iowa, has found quite a number of specimens around Melrose which is in S.W. Monroe County in the southern part of the state. Some of the specimens found are:

Biotite: tiny, lustrous black flakes in a pinkish granite found in a large rock in a ditch. Bronzy altered biotite in a pinkish granite was found in an open field.

Calcite: Reddish, xline mass. Found in numerous septeria-like masses on open hillside.

Epidote: Green, xline masses in amygdules of a purplish basalt, found in nearby field. Greenish epidote mass with reddish feldspar and smoky quartz, found as a large mass in a ditch.

KANSAS—Red jasper pebbles have been found around Idana, Clay Co., Kans., by Walter Brannan, Idana, Kans.

KENTUCKY—"Am sending you a Kentucky specimen. It comes from Lockport, Henry County. Some of the people who worked the mine when it was in operation (it is closed now) and they insisted that the white mineral was Bayerite, like Bayer aspirin, and that it was used in medicine. I could not find such a mineral in Dana's or the mineral dictionary. It looks considerable like a form of barite and I did find some low grade crystals of barite on the dump (not a large dump)."—letter dated Oct. 12, 1957, from Maj. Raymond V. Prueitt, Sulphur, Ky.

The specimen received is a massive white barite coated by pale grayish strontianite—small lead-gray cleavable masses of galena are imbedded in the barite. The strontianite fl. orange under long wave.

Bayerite is an artificial form of aluminum hydroxide, metastable with respect to gibbsite, obtained in the K. J. Bayer process for the purification of bauxite. As neither barite nor strontianite contain aluminum, it is doubtful that they alone were used for the manufacture of bayerite. Bauxite is the chief ore of aluminum and it is possible that by treating bauxite with barite by the Bayer process that bayerite (aluminum hydroxide) is formed. Aluminum hydroxide is used in medicine for treating indigestion.

LOUISIANA—Pale brownish chalcedony pebbles have been found in a large pit near Monroe, Ouachita Parish, La.

MAINE—Don McKeen, Box 16, East Wilton, Me., sent in an interesting specimen which consists of brassy-yellow pyrite xls imbedded in a fine grained mica schist—some of the xl faces have altered to dark brown limonite.

"This specimen taken from ledge, Rt. 27, New Vineyard, Franklin County, Maine."—on label.

MARYLAND—From Catoctin Mt., Frederick County, Md., we have a specimen consisting of tiny rock xls, some doubly terminated on white sandstone—black stains of manganese oxide coat most of the specimen. We are indebted to Zelma H. Wright, Jr., 3105 Dundalk Ave., Baltimore 22, Md., for this interesting specimen.

MASSACHUSETTS—"A mentionable occurrence of siderite is at Weston, Middlesex Co., Mass. At the rear end of the Mass. Broken Stone quarry, currently being worked, is found the siderite, particularly in the road fill near the railroad tracks. The siderite occurs as

light to dark brown micro crystals in vugs and seams in an altered rock badly stained brown.

"Many micromount specimens can be culled out but cabinet specimens are rather uncommon.

"Prehnite seems to be present in the quarry. Probably a little can be found if one looks over the entire quarry."—letter dated Nov. 11, 1957, from Carl Anderson, 145 East Central St., Natick, Mass.

MICHIGAN—Cellular, blackish masses of limonite have been found in Nashville, Barry Co., Mich., by Harry A. Laurent, P.O. Box 345, Nashville, Mich.

MINNESOTA—Grayish to brownish to reddish ribbon agate pebbles have been found around Little Falls, Morrison Co., Minn.

MISSISSIPPI—A dark brown petrified wood pebble was sent in by J.S. Locke, 39-48th St., Gulfport, Miss. The locality for the pebble is Bell Creek, Harrison Co., Miss., about 18 miles N.W. of Gulfport.

MISSOURI—"Here is a recent unusual find that can be put with the uranium notes I gave you (see Jan-Feb 1958, p. 20).

"Carnotite can be found in St. Louis, Mo., clay mines in very minor amounts coating various plant and tree fossils. Occasionally pea-size lumps can be found with seed pods, sigallaria, lepidodendron, or plant leaves in the gray Cheltenham clay of Pennsylvanian age.

"Several black shales of the Warsaw and lower Salem limestone of eastern Missouri have extremely minute carnotite occurring in them. Locally this has caused several real estate price booms till people realized the situation.

"Recently some minute radioactive minerals were reported occurring near Valles Mines, (Jefferson Co.), Mo., associated with barite, galena, sphalerite, marcasite and pyrite in the Potosi formation."—letter dated Nov. 3, 1957, from Joseph A. Schraut, Jr., 877 N. Woodlawn Ave., Kirkwood 22, Mo.

MONTANA—"Libby (Lincoln Co.), Montana; The Zonolite Mine, situated on Rainy Creek about 4 miles northeast of Libby, is open to collectors. Permission to collect on the dump or to collect in situ in the open pit, may be readily received by checking with the watchman at the gate. The mine dump, about 7 miles from the center of Libby, is clearly visible from town and is an impressive sight. A tour of the mill is usually conducted for visitors. Fine specimens of vermiculite are readily available. Some massive specimens of galena have also turned up in large amounts. In 1955 the writer discovered an exposed vein of chrysocolla and these made specimens that compare very favorable with copper specimens in his collection from the famous U.S. localities."—note sent in by Gerald Navratil, RFD 2, Box 70, Middleburg, N.Y.

NEBRASKA—"I have long wanted to send you some items from Nebraska for your column—at last I have gotten around to it. Here are 4 items which I hope are interesting enough to mention.

"Incidently I want to invite all who come thru Lincoln to stop and see me. I have one of the largest private mineral collections in the city and I am always glad to stop work and talk rocks."—letter dated Feb. 7, 1958, from Irl Everett (Everett Lapidary Shop), 2941 N. 65th St., Lincoln 5, Nebr.

One of the items received was a very nice slab of petrified wood—chiefly brown in color, some red, yellowish. It is of good quality and should take a nice polish.

"A very nice slab of petrified wood from the Cozad sand pits, Cozad, Dawson Co., Nebr. Notice the bright reds, yellows, etc. in it. This is one of the nicest pieces I have seen."—on label.

NEVADA—"The Pinenut Range east of Carson City (Ormsby Co.), Nev., is a vast area to cover and many minerals are present there, but among a few are copper, pyrite xls, turquoise (poor grade but fun to find nevertheless), epidote, petrified wood, and many more. Bruns-

wick Canyon on the Carson River has a large concentration in a small area of all these minerals. El Dorado Canyon has much petrified wood of a prevailing green color banded with white, although red, brown, and yellow varieties are also present for the patient observer."—note sent in by A/2c Lawrence E. Wright, 55 PMS, Box 119, Forbes AFB, Kansas. Mr. Wright's home is in Carson City, Nev.

NEW HAMPSHIRE—Mrs. Louise P. Mullen, 24 Chestnut St., Brattleboro, Vt., sent in a specimen consisting of black limonite and tiny rock xls in massive smoky quartz. The locality for the specimen is Walpole, Cheshire Co., N.H.

NEW JERSEY—A very nice polished slab of breccia was given us when we recently visited Lawrence Chapman, 41 Church St., Franklin, N.J. It consists of dark gray (almost black) limestone, milk-white calcite, and brassy-yellow pyrite.

"Breccia, Buckwheat Dump, Franklin, Sussex Co., N.J."—on label.

NEW MEXICO—"In some samples received recently from Scott Williams, 2346 S. Scottsdale Road, Scottsdale, Ariz., from habit, I decided to check the specimens with a RADIANT ultra violet dual unit. The specimens consisted of iridescent chalcopyrite xls on massive ore matrix with numerous visible quartz and calcite xls liberally sprinkled in with the chalcopyrite. Very attractive specimens. I was delighted to discover that all of the calcite xls fluoresce an attractive pink, both long wave as well as short wave. (From Ground Hog mine, Vanadium, near Silver City, New Mexico—on label).—note dated Jan. 8, 1958, from Gerald Navratil, RFD 2, Box 70, Middleburg, N.Y.

NEW YORK—"I would appreciate your noting in the World Occurrences about a new location near Whitehall (Washington Co.), New York, from which very unusual crystals of calcite are found with acute rhombohedral habit. I do not mean that the crystals are so very unusual, but the occurrence is unusual.

"The occurrence is in a gravel bank of pleistocene sands and gravels intermixed with ancient beach clays. Calcium has been leached out of the residual material and carried downward by the ground waters resulting in the formation of a conglomerate with calcium carbonate as the cementing agency. The gravel size ranges from a fraction of an inch in diameter up to 8-9 inches. The calcium completely surrounds the gravels in concentric layers and where open spaces between the gravels permits, stalactitic calcite is formed. Calcite crystalled-lined cavities are found between some of the larger gravels. Almost without exception the crystals grow downward in these cavities. The bottom of the cavities are filled with the massive, concretionary calcium. The crystals of calcite make excellent micro-mount material, being very sharply developed acute rhombohedrons. This is a most unusual occurrence of a calcium cemented conglomerate, and such sharp acute rhombohedral development of the calcite crystals. The calcite both as crystals and as flow material around the gravels is vividly fluorescent and phosphorescent of a white to greenish-white color. Residual clay invariably is found backing the calcite from which the crystals protrude.

"I know this to be a noteworthy occurrence and believe it should be of interest to R&M readers."—letter dated Dec. 18, 1957, from Elmer B. Rowley, 214 Ridge St., Glens Falls, N.Y.

Some few months ago we received a very nice mottled orange-red and white agate cabochon that had been sent us by Merton McKown, 22 Pergola Ave., Jamesburg, N.J. "Please find enclosed an agate cab found at Glen Cove (Nassau Co.), N.Y., about 1938. So far as I know this is the only agate found on Long Island and thought it might be of some interest to you."—on label.

Glen Cove, on the N.W. shore of Long

Island, is noted for lignite, limonite geodes, and pyrite xls. All found on the beach. A note from Mr. McKown tells how he found the agate.

"One day, in 1938 I believe, as I was walking along the beach at Glen Cove on way to the pyrite locality, I turned over numerous rocks of conglomerate and concretions. One concretion had a fossil leaf in it, top part broken off—while I was looking for the missing part, I found the other half of the leaf. A little further on I saw a rectangular rock about 4" square and 2" thick—ocher color. When I picked this up, I saw it was an agate. I did not appreciate its quality until I cut it 2 years ago (spring of 1956)—have made some brooches 18 x 25 mm."

NORTH CAROLINA—"I have enjoyed reading the issues of R&M during the past year. During a one week trip to North Carolina last June several of the issues were quite helpful in locating some of the interesting feldspar and mica quarries in the Yancey and Mitchell County region in the western part of the State.

"I had an opportunity to visit the McKinney Quarry in the Little Switzerland area not far from the Blue Ridge Parkway as well as the old emerald mine on Crabtree Mountain (both in Mitchell County). Some interesting pegmatite materials were collected including black tourmaline from McKinney quarry and some emeralds from the Crabtree mine. A considerable amount of red almandite garnet was noted in association with microcline and muscovite at the McKinney quarry as well as in several smaller cuts along the road leading up to this quarry from State route 19 E. Did not, unfortunately, have sufficient time to find any rare earth minerals such as samarskite but did get a small amount of yellow uranophane.

"This area is well worth a collector's time and I hope to go back again to do more collecting."—letter dated Jan. 24, 1958, from S.W. Poole, 1346-22nd St., N.W., Canton 9, Ohio.

NORTH DAKOTA—About 5 years ago when the Moffit oil well was drilled, located 3 miles south of Moffit, Burleigh Co., N.D., a number of diamond drill cores were obtained by a collector, now deceased. (S.T. Parke of Sterling, N.D.) We have one of the cores, 3½ inch diam., of dark gray massive gypsum.

OHIO—"Enclosed you will find a piece of chalcedony which was found near Brownsville (Licking Co.), Ohio. This material seems to be quite plentiful in this locality. There is a state park there called Flint Ridge and is quite noted for artifacts. The crystal group is rather nice."—letter dated Feb. 7, 1958, from Dr. Edward L. Kelly, 942 W. 10th St., Erie, Pa.

The specimen is a mottled brown, gray and white chalcedony, half of which is encrusted by drusy rock xls. It is a handsome specimen.

OKLAHOMA—Near Broken Bow, McCurtain Co., Okla., small groups of dark green quartz xls have been found—the green color is due to chlorite inclusions.

OREGON—a pinkish cellular mass of pumice from Chemult, Klamath Co., Ore., has been sent us by Mrs. Inez O. Rogers, P.O. Box 184, Oakridge, Ore.

"Pumice is used for several purposes from building blocks to scouring powder. We have mountains of it."—on label.

PENNSYLVANIA—"A new locality for petrified wood has been discovered and this discovery has been verified by the writer. The new area is the farm of George Clauser, Rt 100 near Bucktown, Chester County, Penna. So far as the writer knows, no petrified wood was ever found in this part of Chester County, if in any part. The area in general appears to be an uplifted marsh or a plugged old valley. The silica in adjacent areas appears to be sandy reddish conglomorate. This new wood has not yet been identified. The material does not seem to be jasper or basanitic and it is not a cast filling. The pieces found so far will not weigh more than ten

pounds, probably much less. Chips of a few ounces and log sections up to about three pounds have been found by Mr. Clauser. The one good specimen is perhaps five inches in diameter and about as long. The general color seems to be iron-brownish-black and the luster after lapidary work is about the same as fine agate but it is much easier to work than agate and polishes very quickly to mirror luster. The area around this section will need careful investigation. Permission must be absolutely obtained from owners before entering fields. No doubt this new wood is the result of bog iron and silica replacement."–letter dated Feb. 24, 1958, from Chas. A. Thomas, 706 Church St., Royersford, Penna.

RHODE ISLAND–Several boulders of orbicular granite on the beach at Quonochontaug, Washington Co., R.I., were described by J.F. Kemp in 1894. Some of these boulders and fragments of them may still be seen here, but no one has ever been able to find the present ledges.

SOUTH CAROLINA–About 3 miles S.W. of Gaffney. Cherokee Co., S.C., is the old Cameron lead mine which supplied lead to the Confederacy during the Civil War. The ore was silver-bearing galena which afforded 58% metallic lead and 60 oz. of silver to the ton of pig metal. Cerussite, chalcopyrite, malachite, pyromorphite, siderite and xled quartz were some minerals found with the galena.

SOUTH DAKOTA–From the Missouri River at Yankton, Yankton Co., S.D., we have an interesting specimen that was sent in by Mrs. Ed. P. Olson, Beresford, S.D.

The specimen is a 1x1½ inch flat pebble consisting of a dark brown limonite on a grayish chalcedony. Under the s.w. the chalcedony fl. orange.

TENNESSEE–"It is always a delight and a pleasure to pick up R&M and read about some one's wonderful trip and the photographing and finding of beautiful minerals.

"I have been able to obtain some geodes, filled with beautiful, pure white, transparent crystals, 15 miles southwest of McMinnville (Warren Co.). Tenn. Highway 70. These are large ones and they usually sell them along the highway, on stands where they have quite a collection."–letter dated Jan. 21, 1958, from Miss Juliette Desport, 1229-17th Ave. So., Nashville 12, Tenn.

TEXAS–Black lustrous platy hematite on massive smoky quartz have been found one mile west of Valley Spring, Llano Co., Texas, on highway to Brady. At the same locality tiny lustrous whitish flakes of muscovite on granular, black hematite have also been found.

UTAH–A recent letter from Pat Fancher, Box 63, Ouray, Colo., reads:

"At the Far West mine in San Juan County, Utah, I found a six inch section of petrified wood replaced by uraniferous asphaltum. Also numerous smaller pieces."

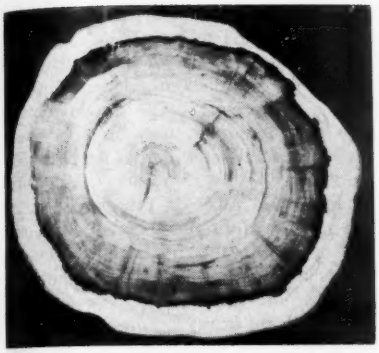
VERMONT–From the abandoned talc mine at Chester, Windsor Co.. Vt., we have two interesting specimens that were sent in by Harold P. Trefethen, 98 Allen Ave., Waban 68, Mass. The specimens are:

Actinolite–Green, radiating with grayish talc.

Biotite–Lustrous black flakes with dark green chlorite.

VIRGINIA–Cream-colored masses of scheelite occur with massive milky quartz in the tin deposits at Irish Creek, Rockbridge Co., Va. The scheelite fl. bluish under the Mineralight.

WASHINGTON–"Enclosed is a photo of a 10 inch section of a petrified walnut tree. This came from Saddle Mountain close to Beverly (Grant Co.), Wash., which is now closed as it is within the AEC Area. There must have been a terrific earthquake or upheaval in this



Petrified walnut tree from Saddle Mountain, close to Beverly, Wash.

area sometime in the past as it is very difficult to find a complete section that one is able to saw and retain intact the complete section. This is the only one I could get out of a 14 inch long section of the tree. I did, however, manage to make some bookends out of balance of the log which are only half sections.

"Petrified wood localities here in Washington all getting more and more difficult to get into as the property owners are getting very disgusted with the way people are going in without permission and leaving gates open which let their cattle out, and I know of two instances where the people have cut the farmers' fences and drove across their seeded grain to get petrified wood. These farmers now will not let anyone collect on their places and will have anyone arrested that they catch trespassing." –letter dated Jan. 20, 1958, from L.A. Davin, Rt. 1, Box 120, Walla Walla, Wash.

WEST VIRGINIA–Drusy smoky quartz xls on petrified wood have been found in and around Davis Creek at Charleston, Kenawha Co., W. Va.

WISCONSIN–"I have been reading R&M for the last 5 years and enjoy it very much. It helps a lot in learning to be a mineral collector.

"I am sending you a sample of stone from a ledge near Stone Lake (Sawyer Co.), Wisc. I have been trying to find a practical way to cut it for flagstone and veneer. It all runs about the same–some straight grained and some curled giving it a petrified wood effect.

"Could you tell me its composition, whether it would take a polish, and also what you think would be the best way to cut it for commercial use?

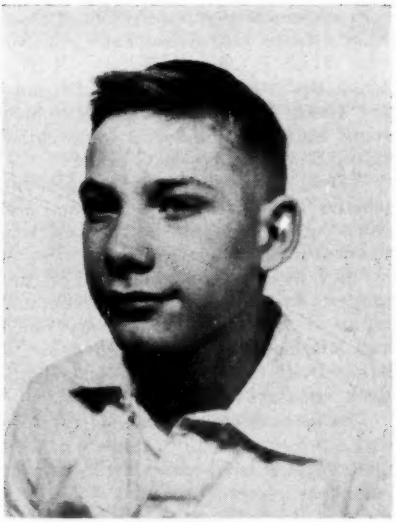
"As I have been paying taxes on this property for the last 4 years without any return, I would appreciate very much any information you could give me."–letter dated Jan. 17, 1958, from Henry Reck, Rl, Box 45, Naperville, Ill.

The specimen received is a very nice dark red and gray thinly banded quartzite–the bands are straight, circular and wavy.

Quartzite is an extremely hard stone and is difficult to quarry but due to its excessive hardness, attractive banding, nice color and great beauty when polished, Mr. Reck's material should be very popular for decorative purposes or for many ornamental objects.

Quartizite is used as a building stone, for crushed rock, sandpaper, etc.

WYOMING–"I am 15 years old and a sophomore at St. Mary High School. I have been collecting minerals for about three years. I am very interested in geology and science, and belong to the Science Club at school. Last year I choose crystallography for my Science Club project and in the regional science fair won 1st prize, while in the Colorado-Wyoming Science Fair I won an honorary membership in Colorado Mineral Society and an invitation to take my exhibit to the National Gem and Mineral Show that was held in Denver last summer. The show was truly marvelous and I came home with a green ribbon for special award. This year I am continuing this project and doing some research on x-rays and crystals. I plan to be a mineralogist and would appreciate any advice from the editor



John Maraldo.

or readers. Enclosed is a picture of myself taken this year.

"Some of the minerals I have found near Cheyenne (Laramie Co.), include agate, flint, jasper, quartz and many others. South of Laramie, Albany Co., Wyo., about 2 miles south of Tie Siding, Highway 287, quartz xls are abundant in the feldspar pits about 2 blocks N. of the highway. The xls are coated with iron oxide and are usually terminated. Near Mountain Home (Albany Co.), Wyo., there is an unoperating copper mine where massive azurite, malachite, quartz, and associated minerals can be found. Muscovite mica is found in an old mica mine near Fox Park (Albany Co.), Wyo. Near Woods Landing (Albany Co.), Wyo. at the famous "Maraldo Cabin" gneiss, granite, and some minerals are found.

"I have also purchased some rare and beautiful minerals including a smoky quartz xl with a large moveable bubble and a nearly perfect 5" smoky quartz xl. I enjoy R&M very much and think it is the best in its field."—letter dated Jan. 21, 1958, from John Maraldo, 1856 Converse, Cheyenne, Wyoming.

AUSTRIA—"On a trip last summer to the Untersulzbachtal Valley in Tirol (Tyrol), Austria, Dr. Werner Lieber and I and our families, made a short trek to the once world-wide known epidote location. Although we obtained some nice specimens of the epidote with some small xls, we were rather disappointed to learn the place is practically useless anymore. Many fine specimens with crystals can probably still be found by digging carefully under the debris but work it takes, and the trip up the rock coated steep hillside in my opinion is not worth it. It is rather dangerous in that slides are highly probable and one can get hurt very easily. I, for one, will go to many extremes for specimens and almost put my neck in a noose but not here anymore.

"This place is the result of what not to do in the mineral collecting field. It seems some enterprising individual came fully prepared to make a grand haul, all at one time. Well, a grand haul he made alright. With some additional help, undoubtedly, he made a series of holes—about 40, it is alleged—and planted much dynamite. Boom—boom—baroom; no more epidote location. Everything was shattered but good. A world-famous epidote locality—famous for fine epidote xls many inches in length—died a heartbreaking death!"—letter dated Feb. 3, 1958, from SFC Bill Malarkey, P.I.O. U.S. Armed Forces Recreation Area, Bechtesgarden & Chiemsee, APO 108, % P.M., New York, N.Y.

JORDAN—A number of pebbles from Elishas Spring, near Jericho, Jordan, was sent us by L.O. MacMurdy when he was stationed in Lebanon (he is now in the Philippines). Jericho is in eastern Israel; Elishas Spring is in western Jordan. The pebbles are as follows:

Quartz (*chalcedony*): thin bluish vein in dark brown chert.

Quartz (*chert*): white pebble; brown pebble.

Quartz (*drusy*): colorless crust on dark gray chert pebble.

Limestone: Dark gray (almost black) pebble.

Limestone: (breccia): flat pebble, greenish on one side, gray on the other cementing large white chert grains.

Limestone: (fossiliferous): dark gray mass.

"Rocks from Elisha Spring, near Jericho, Jordan.

"Fresh water flowing since Biblical times. Today Palestine (Israel) refugees from large camps nearby get their daily jugs of water."—on label.

LEBANON—"High in the mountains of northern Lebanon are the few remaining 'Cedars of Lebanon'. These trees, in addition to being the National Symbol of this country, are visited by many tourists. The region is a popular ski resort each winter. Near the 'Cedars' at Groote Kadicha, I found a pocket of clear calcite xls."—on label enclosed with a number of specimens that were sent us a few months ago by L.O. MacMurdy when he was stationed in Lebanon, a small republic bordering on the eastern Mediterranean. Mr. MacMurdy is now in the Philippines.

Among the specimens from Groote Kadicha were:

Calcite: colorless, rhombohedral xls in cavity of massive, gray limestone. Some of the xls are coated a thin pale brownish crust which fl. green under L.W.

Calcite (*stalactite*): cream colored, tapering from 1½" to 1" and 3" long.

Calcite (*stalagmite*): cream colored mass.

Quartz (*chert*): cellular, grayish mass. "This stone was picked up within 6 feet of the trunk of the famous tree (Cedar of Lebanon) which symbolizes the Republic of Lebanon.

"From the grove of the famous Cedars of Lebanon."—on label.

SCOTLAND—"There will be nothing in this epistle for R&M but I have one or two items lined up—for instance a Miss Miller, who lives near Dunoon, Argyleshire, Scotland, was given my name by one of my friends and I 'turned' her over to Hugh McCallum who has a summer residence near Dunoon. Well last Thursday night Hugh told me that he had received a few very small pearls from her. They are mussel pearls. so I am trying to get the exact locality, the zoological name of the mussel, and a couple of specimens to send you. That should make an interesting paragraph."—letter dated Dec. 14, 1957, from Sandy Ramsay, 1015 Aikenhead Road, King's Park, Glasgow S4, Scotland.

"A 2nd letter, dated Feb. 25, 1958, from Sandy arrived and it reads:

"Here are the pearls. I am enclosing Miss Miller's letter to save repeating what she writes. I always was a terribly lazy guy.

"Nothing else to report unless you call shovelling snow off the sidewalk interesting. I surely don't.

"Am off, if anything else crops up, will let you know."

The pearls, lovely little things of a light gray color and ranging in size from tiny up to ⅛ inch in diameter, varied in form. Some were perfect little globules, some were elongated, others a little flattened.

Here is Miss Miller's letter to Sandy:

"It was very kind of you to go to all that trouble, sending R&M magazine for which I thank you. By the way I am posting the pearls today to our mutual friend, Mr. Hugh McCallum.

"Your article on collecting in Scotland in 1957 (Jan-Feb 1958, R&M) was a jolly good one and I wonder why you export your literary work instead of giving it to Scots Magazine or the Scottish Field. Is it that the trade secrets are better guarded from amateurs within reach of the various quarries. It's quite safe to tell the man from Alabama that there are garnets in such and such a place as he can't hop along there at the weekend and cash in. But if you told the Scottish Field—well there might be a big gold rush!

"Well here are 2 mussel shell specimens which had small pearls in them. They are hoary specimens aren't they,

all barnacles. It seems that a mussel lives about 8 years. The spot where I collect is just opposite from where Trinity Road joins main shore road at Innellan.

"This mussel bed is not unique, as there are others in sheltered bays all along the coast here. I have been told that a sandbank is a good locality.

"At present it's too cold to patter about the beach, but I hope to do a bit of collecting when the weather becomes warmer. Today, however, just to try my luck I went down through the snow and got a few pearls. The 2 shells enclosed were pearl bearers of 5–1 large (as they go) and 4 smaller."–letter dated Feb 24, 1958, from Margaret S. Miller, Trinity Road, Innellan, Argyleshire, Scotland.

The 2 shells (2 halves of a complete shell) are 1x2 inches in size, black in color and about half coated by gray barnacles. Innellan, on the west bank of the Firth of Clyde, is in eastern Argyleshire.

Sandy's 2nd letter goes on to say:

"Am enclosing a clipping from the *Scottish Sunday Express* (Glasgow) of Dec. 2, 1957, which I thought might be of interest to you. As usual with reporters I am quoted out of context, though it is right enough that I have half the U.S. Air Force visiting me."

The clipping reads as follows:

———

G.I.s hunt the gems in the glens

American Service men are prospecting along Scotland's beaches and glens for the untapped wealth which local people ignore.

With hammers and chisels they spend their leaves searching for agates, cairngorms and amethysts to send back home.

Many of them travel from their bases in England to join the hunt. Some even come from Germany.

Glasgow geologist Mr. Alexander (Sandy) Ramsay is helping the Americans.

He said yesterday: "The prospecting craze is sweeping America and there is a tremendous demand for Scottish stones.

"Any enterprising Scottish firm could make a lot of money on the U.S. market. It has become a very big business."

The only Scottish jewel exported commercially at present is the mussel pearl, found in the Tay.

SOUTH WEST AFRICA–A nice pink mass of spodumene was sent in recently by Jim Neal, 12 New St., Mt. Joy, Penn.

"Got this specimen from a G.I. who served in Africa during World War II. This specimen comes from near Kubue, S.W. Africa."–on label.

SYRIA–Damascus, the capital of Syria, is in the S.W. part of the country. Damascus is the oldest continuously inhabited city in the world, dating back 6,000 years.

From Damascus we have a specimen of gray, porous limestone–some of the pores or cavities are filled with white calcite. This interesting specimen was sent in by L.O. MacMurdy when he was stationed in Lebanon, which adjoins Syria on the west (he is now in the Philippines).

"This is a chunk from the ancient gate to the street called Strait, Damascus, Syria."–on label.

———

Costs $1 to visit Franklin, N.J.

Editor R&M:

Please advise readers of R&M that the town council of Franklin, N.J., passed an ordinance charging $1.00 per person to collect minerals from the Buckwheat dumps in Franklin, N.J. You pay the $1.00 when obtaining the permit which is also required.

Thomas R. Lewis
Box 1
March 1, 1958 Hamburg, N.J.

Mr. Lewis should know, as he lives only two or three miles from Franklin. Even so, the $1 fee is very reasonable for the opportunity to visit the world-famous zinc mine dumps. Bear in mind that Franklin, N.J., is in second place among the mineral localities of the world; No. 1 place goes to the manganese mines in Langban, Sweden.

THE MICRO-MOUNTER

Conducted by Neal Yedlin—129 Englewood Drive, New Haven, Conn.

The mails have just brought us 2 back numbers of "Arizona Highways" magazine, dated November 1956 and November 1957. This is a magnificent publication and normally contains color photographs of the superb scenery of Arizona. The issues we now have are noteworthy for their mineralogical content—contributions by Arthur Flagg and Floyd Getsinger of Phoenix, Arizona.

In the 1956 issue Flagg has entitled his article "Beauty from the Earth" and has described Arizona minerals and mineral collecting. Getsinger has supplied colored photographs of minerals, and they are very fine. He also has a rather complete article, "Photographing Minerals in Color" in which he describes in detail the technique he uses to achieve the results printed in the magazine. Together there are 25 photographs in full color, including the front cover.

The 1957 issue is of greater interest to m/m collectors. Flagg's "Petite Minerals" discusses in full thumb-nails and micro-mounts. His work is excellent, concise and authoritative, and supplements well the previous literature on the subject.

In this issue too, Getsinger has done two things. He has written a treatise entitled "Photographing Mineral Micromounts" and has supplied beautiful examples of his work. His wulfenite, aurichalcite and green-brown vanadinite are the best we've seen. Our own technique is somewhat different from Getsinger's, for our choice is the photographing of isolated crystals rather than complete specimens, and we photograph through a 'scope instead of using extension bellows as Floyd does. However, results speak for themselves, and Getsingers are far from mute. His colors are exquisite and his knowledge of light values is of high order.

He discusses his difficulty in photographing dioptase. We, too, have made some 25 to 30 exposures, with varying lights and filters. The best we've been able to do was to get a green that exhibited blue tones in the finished transparency. Other green minerals photographed fine. Malachite, pyromorphite, uvarovite garnet, cabrerite, atacamite, epidote and vandenbrandeite all developed beautifully. But the dioptase was a "killer". Our final result, an isolated cruciform compound xl, from Tiger, Arizona, is one of our choice slides. It remains, however, a fine green, but with a slight blue cast to it.

Again we suggest that you try to obtain these issues. Thirty-five cents each. Write for "Arizona Highways", Arizona Highway Dept., Phoenix, Arizona.

A letter from Dick Thomssen, and some details regarding the Mineral Exploration Society. Among other things he says:

"Richard Bideaux and I started over a year ago. (Letter dated 3/2/58.) Our aims were to expand the knowledge of minerals and deposits of the southwest, and the publication of a bulletin wherein these aims could be set down as concrete contributions. After a lot of discussion the first issue was put together for Jan.-Feb. 1957. An important fact has been brought out during the year's publication of the bulletin, the 'Mineral Explorer'. It is foolish to limit our studies and publications to minerals of the southwest, since a detailed knowledge of any minerals and localities is significant. So we'll spread. Meanwhile Dick Bideaux and I constitute the entire editorial and production staff. Our finances are limited, and this restricts us to a circulation of about 50, made up of professional mineralogists and advanced amateurs. We'd like to expand—but how? We do not intend raising dues of the society members,

nor do we want to charge for the bulletin . . ."

May we suggest, then, that those of you micro-mounters who are interested send 4 large self-addressed stamped envelopes to Mineral Exploration Society, P.O. Box 4981, University Station, Tucson, Ariz. While this in no way compensates the boys for their efforts (Nor do they want remuneration) it at least takes care of time and postage.

This 'Mineral Explorer' is good. It describes localities that have been recently visited and at which minerals are immediately available. We have before us the Nov.-Dec. 1957 issue. Two localities are discussed. First, the Silver Bell mine, Gleeson, Ariz. Detailed directions including locations of minerals in the mine, promising and productive shafts and tunnels as well as lists and descriptions of minerals found, are given. The second locality is an old rediscovered Spanish mine. The ores and minerals are set forth and a brief note on a comparable locality–Schwatz, Tyrol, is made.

A short exchange of correspondence with Mrs. Freda Thomas, Roxbury, Maine, and two specimens arrived for identification. Both were 2 x 3 specimens of cleavelandite from Newry. One had a vein of blue-grey triphyllite altering to vivianite, and had one or two good vivianite xls. The other had at least a dozen splendid dark blue vivianites in the interstices of the albite, together with tan balls of roscherite. In addition, one xl of blue apatite was visible, prismatic with basal terminations. These xls were micro in size, but very fine.

Our urgent request still circulates. We want to see any purple mineral from the first-approached quarry at Newry, Maine, showing minute xls, pyramidal in habit. Please look through your Newry albite, and your Newry apatite. And carefully examine your Newry roscherite and eosphorite. A new mineral is being worked on at the U.S.G.S. and more material is needed.

Addenda to the collection.

1. *Zinnwaldite–Amelia, Va.* (*When first opened in the early* 1930*s, the Morefield mine turned up considerable quantities of this iron-lithia mica as large books and masses, sherry-brown in color, up to* 8" *in cross section. This micro specimen was found by Phil Cominsky, of Falls Church, Va. in the dumps at the Rutherford mine. Light pink in color, in thin transparant xls in the albite interstices, this is a welcome addition to the collection.*)

2. *Fluorite, polybasite, pyrite and chalcopyrite–Sonora, Mexico.*

3. *Lepidolite and Topaz–Pala, California.*

4. *Topaz and tourmaline–Pala, California.*

5. *Arsenopyrite; sputtered with pyrite–San Louis Potosi.*

6. *Wulfenite; prismatic–Chihuahua, Mexico.*

7. *Gold–Kittitas Co., Washington. The best we've ever seen. Superb groups of xls, spear forms, arborescents, individuals etc. This gold formed in calcite and was able to crystallize easily. A soaking in oxalic acid cleaned up the iron stains. Fully as good as the fine gold from Vorespatak, Transylvania.*

8. *Quartz; phantom and bubble–Middleville, N.Y.*

9. *Prehnite; transparant tabular xls, with apophyllite–Centreville, Va.*

10. *Sphene; honey-brown triclinic xls in albite–Centreville, Va.*

Toward the end of February, last, a large mass (50 lbs. more or less) of hemimorphite from Eureka, Tintic District, Utah, was moved at the National Museum, Washington, D.C. The catalogs indicate that the specimen was accessioned in 1913. A small fragment was chipped in moving and was inspected by Paul Desautels, associate curator of mineralogy and petrology at the museum. Under a binocular 'scope, always available and ready for use there, minute black hairlike xls were evident, scattered throughout the mass. Now we have a new locality for plattnerite. And after 45 years, too!

Now we ask you: "What would the world of mineralogy do without micromount enthusiasts?"

WOMEN'S CORNER OF R&M

Conducted by Winnie Bourne
c/o Rocks and Minerals
Box 29, Peekskill, N. Y.

My husband hates rocks!

Dear Winnie:

I had planned for a long time to write to you, and even said so to your "Boss" one time, but time flies and the good ideas never seem to get attended to. But your last (Jan.-Feb. p. 32) "Women's Corner" was so enjoyable that I just have to tell you how much we enjoy your columns. It is a wonderful description of one of the most beautiful spots you can think of, that whole long and wild piece of our California coast line from Monterey South to Cambria and Morro Bay is one of the scenically most beautiful, and still completely unspoiled spots in this country. Some day I hope you can see it. I have some little bits of jade found there, not much though, as the only time we could go there was in August when it is well picked over. But the sea was not a bit glassy, it was rough and wild, huge breakers booming against the wild greenish cliffs, the big offshore rocks white from bird guano, the seas bluish-green with big white breakers—oh, it really is beautiful. We got wet shoes—there is no beach, just rough boulders, so you do have to keep something on your feet, and one goes there when the tide goes out, but once in a while, just when you think you see *that* beautiful green piece, and don't pay any attention to the waves, whoosh, there comes a bigger one and before you know it, you are knee-deep in foam and whatever you saw is gone, and you are so startled, you almost get knocked over when the waves run out again. Lots of fun though, nevertheless! But I did find ONE really good piece, about 2 x 2 x 2, really green and translucent and about as nice as they come—it was high and dry on top of a lot of rocks deposited during the winter, but it was around a corner where there were fewer people, and somehow I was the lucky one to find it.

I often wonder how many other ladies are in the same boat as I, with a husband who "hates rocks." All he likes is golf, which I think is strictly for the birds. But we put up with each other, after all, it's a free country and "to each his own." And I sure am rock crazy! Started collecting as a child, now I am an advanced collector and have over 700 numbered minerals, and goodness knows how many unnumbered —only the pretty and rare ones get into the actual collection and receive a label. I insist first of all on beauty, then on perfection in both crystallization and quality, then on size (not too big) and then on rarity. I also do some cutting and polishing and make jewelry of my own designs. So you can see that my poor husband has a lot to put up with, and he just shudders when I intone the old refrain "Look what I got today —but where shall I put it? I need more space."

I wonder too, whether your faithful and humorous correspondent, Sandy Ramsay of Glasgow, Scotland, plays golf. My husband is a Scotsman too, and he thinks Sandy is crazy to go after rocks when he can play golf "in Scotland"!

My specimens are so beautiful that when we remodeled our living room last year, my husband built in two glassed cabinets on each side of the bookcases, with indirect fluorescent lighting, to display my loveliest pieces, and it adds tremendously to the room and

the general decoration. Even he concedes that it looks nice!

I don't know whether in general women are as active in this line in the East as out here, but it seems to me that the ladies are certainly holding their own in Southern California. The President of our club (Santa Monica Gemological Society) is a lady, for the past two years, and a wonderful president she made; the "Trading Post" which is the name we give our mineral sales table, is held by ladies much of the time (last year it was me, and did I love it!)—half the Show Committee for our Annual Show is made up of ladies, and even our Federation Vice-Presidency was held by Jessie Hardeman a few years ago, and she is a perfectly marvelous person. You should see her collection, it is absolutely fabulous! And if you came to see our night-schools, (a number of high schools here have Adult Education classes in Lapidary and Jewelry making), you would be surprised to see that at least half of the pupils are ladies. So we really hold our own out here.

I can't get my husband interested in minerals, and not even in lapidary, though he loves to work with wood and does absolutely fabulous things, he makes all the furniture for the house which we design ourselves, and a professional cabinetmaker couldn't do better—then, he has his golf, and photography. So now I am trying to get him interested in taking pictures of minerals, as you know, that is quite a challenge, and we can spend an evening together that way. I pick out a pretty specimen, we set up a piece of velvet, lights, and then I become a "studio grip" as helpers here are called in the studios, and help with moving lights, holding up aluminum foil, sheets etc. to throw reflections just where we want them. Altogether it is a most intriguing thing and after he develops his film, he has a marvelous time in his "darkroom" which is just a very messed up bathroom after dark, printing his pictures, comparing various exposures, getting the best out of every detail etc. It is a very fine compromise and maybe some other "desperate" ladies could get their hubbies interested in that, if they can't get them enthusiastic about the hobby itself.

I have two little "pebble-pups", the boy is now 10 and a junior member at the club, he enjoys the meetings and has a small collection of not too bad specimens. The little girl is 5 years old and has a huge collection of rocks, partly tumbled bits that were given her, and the largest part are bits of petrified wood, chalcedony roses and other pieces that are too small or common for us "blasé" collectors, but she treasures them, licks them, "polishes" them with flannel and altogether I think enjoys her collection more than any of us! I do think she will make a fine "Lady Rockhound" some day.

Although my mineral collection is my oldest and still first love, I have gotten into the cutting and polishing end of the hobby too, but mostly because all my life I wanted to learn to make and design jewelry, and I like to get unusual stones of unusual shapes, and so I had to learn to cut and polish first. I do have my own tools, lapidary and jewelry making equipment, and I go twice a week to a nearby high school for Adult evening classes, and once in a while I get an order for a pin or a present and I can make a little profit from it, which promptly gets invested in more tools or rocks. Lately I have made silver jewelry of fine tumbled stones, but making actual settings for the stones, as I do not like cemented things: it is quite tricky but because of the free form of the stones very striking effects can be achieved. I used bi-coloured tourmalines as acorns with a large silver oak leaf; on another pin, five deep purple amethysts of the right shapes, made a lovely violet, with a matching silver leaf—these last two items were sold to a lady in New York, which pleased me no end.

With all this, you probably wonder how I have time for my house—but you know, I have found that housework will not run away, and it just has to be done over again anyhow, so I skip it

here and there and catch up all at one time. I have found that as long as the meals are good my husband's patience can be stretched a very long way!

How I do go on rambling, once I am let loose with a typewriter. I was going to do some of my publicity pieces for our forthcoming show, I am in charge of the magazine publicity again, but now it is way too late, so I shall have to leave that for tomorrow. Anyhow, I got a lot off my chest.

Sure hope that your column will continue a very long time—I enjoy it very much, and so do my friends, particularly my best friend, who also is one of your subscribers and knows a lot more about minerals than I do. She too has a husband who does not appreciate rocks a bit, she used to be in your "Rockhounds Welcome" column but this month it is missing, what happened to all those handy columns? We miss them.

Warmest greetings and best wishes for a very successful and prosperous 1958.

Sincerely,
Kay Robertson
Mrs. Wm. J. Robertson
10334 Ilona Ave.,
Los Angeles 64, Calif.

Beginner's Mineral Study Set

An old friend of R&M, Walter McNamara, formerly of the U.S. Merchant Marine who when in that service had sent us many interesting minerals and sands from Europe, Africa and islands of the South Atlantic, has now branched out as a mineral dealer. Mr. McNamara resides at 3004 Park Ave., Del Rosa, Calif. (a suburb of San Bernardino) and he is dealing in minerals under the name of Mineral Lore.

His specialty is a collection of 20 attractive colorful minerals mounted in a cardboard box which sells for $2.00. This set is chiefly for beginners. He handles also books, magazines and other mineralogical items.

In the four-page folder that accompanies the mineral set appear these two interesting paragraphs:

"Of the various hobbies that engage the interests of a great many folks these days, rock and mineral collecting probably leads the field in popularity. It appeals to people of all age groups, in all walks of life.

"There are a number of reasons why some people go in for rock collecting. Some do it simply as a pastime . . . others collect minerals in order to study their geologic, crystal, or chemical features for scholarly or scientific reasons. Quite a lot of others engage in cutting and polishing gem and ornamental pieces out of rough rock materials, either as a hobby or with a view to selling what they make. Often it works both ways."

If you are a beginner in mineral collecting, or wish to help some beginner, order one or more of Mr. McNamara's attractive mineral sets. It costs only $2.00 per set.

Chose R&M for prize!

Editor R&M:

At the March 17 meeting of the Canon City Geology Club, four magazines were placed on display, one of which could be chosen as a prize. Mr. Douglas Dalgarn, 132 East Circle Drive, Canon City, Colorado, our field trip chairman, won the prize. He selected R&M. Later in the evening our president, Mr. Andrew Halberg, Jr., 315 South 11th St., Canon City, also took out a subscription for R&M. A check to cover both subscriptions is enclosed.

The major club project in progress at the present time is the placing of a bronze marker at the site of the first oil well discovered in the West in 1862. The project is sponsored by the Colorado Historical Association and the Conoco Oil Co. You may have visited the spot when you were here at the National & Area Mineralogical Convention in 1952.

F. C. Kessler, Sec.
Canon City Geology Club
March 28, 1958 Canon City, Colo.

Dealer's printed list of Utah locations

Ken Stewart's Gem Shop, 136 West South Temple, Salt Lake City 1, Utah, has available a printed list of 15 Utah localities with directions how to reach them and what may be found. A sample of gray oolitic sand from the shores of Great Salt Lake is attached to the list. This sheet will be given free to anyone who calls at the shop or who may send in a request for it, accompanied by a self-addressed, stamped envelope.

Collecting Minerals

By MORRIS J. ELSING, E.M.
95 Camino Espanol, Tucson, Arizona

I am a retired mining engineer and have been collecting minerals for fifty years. I started my professional career as a stope engineer at the Copper Queen mine in Bisbee, Arizona. In those days beautiful specimens went down the chute and to the smelter in carload lots. Those days are long since gone, and today it is difficult to find beautiful specimens at most of Arizona's great copper mines.

Size of Minerals

My early collecting included minerals of all sizes, and to a certain extent it still does. My present collection is not one collection but a series of collections where there is some duplication. The method to be described includes a much greater number of variations of the same mineral than is commonly collected. The number of specimens being so great, it was decided to collect only small specimens. They average from 1 x 1 to 1½ x 2 inches. The maximum was decided upon because this is the size of the compartments in the plastic boxes which are presently available. These boxes are approximately 7 x 11 inches and contain 18 compartments 1½ inches deep. These boxes make an ideal method of storing and displaying beautiful, superb specimens.

Mineral Segregations

There are numerous ways to segregate minerals into groups. As an economic mineralogist my personal opinion is to segregate minerals into groups based on their metallic content. In other words, I like to see collectors keep all their copper minerals together as one big family. Lead-zinc minerals usually have to be combined because their primary source is so often a combination of the two. Iron minerals fall into a natural ground. There is a large group of miscellaneous mineral derivatives of molybdenum, vanadium, tungsten and other similar minerals that can be kept together. The calcites should go together and the silicates comprise another group. Precious metals is a natural classification. Pseudomorphs are one of the most interesting groups.

Segregation within the Group

Segregation within the group is exceedingly important, not only as a matter of interest but it is of the greatest educational value. Minerals are known as being either primary or secondary. One of the best illustrations is found in the copper group. The most important primary copper minerals in southwestern United States are chalcopyrite, bornite, and cupriferous pyrite. There are several others but of much less importance. There are more than a score of beautiful, spectacular secondary copper minerals which were once the more commonplace primary minerals. The original deposit of primary copper minerals was attacked by oxygen carried in rain water as it descended from surface to an underground water level. This oxygen changed the primary sulphide minerals into carbonates, oxides, silicates, and various other forms. As a group they are the most colorful and most beautiful of all minerals.

Collectors should gather not only the primary and secondary minerals but also the transitory stage of a primary mineral altering to a secondary mineral. There are scores of these. The most common transition is for the primary copper minerals to turn into secondary chalcocite, but the secondary chalcocite may have various characteristics. For example, there are steely chalcocite, crystalline chalcocite, sooty chalcocite as well as

other varieties. Each is a collectible item.

Under certain conditions chalcocite will alter directly to malachite, or chalcocite will alter to native copper. Native copper may alter to cuprite or the reverse can happen. To get the most pleasure out of your collection these transitions should be obtained. It is recommended that all possible variations be included. Referring to chalcocite again, chalcocite altering to malachite should be included with the chalcocite series; and where almost all the chalcocite is gone and the specimen contains almost pure malachite, the specimen should be included with the malachite series, of which there are numerous varieties. To mention a few, malachite may be dense and massive or fibrous, acicular, botryoidal, mammillary, stalatitic, or pseudomorphic. Collecting this way makes mineral gathering more than a hobby.

Mineral Combinations

The combination of two or more minerals is very common. Malachite and azurite are very much alike in composition and very often occur in the same specimen. Galena and sphalerite likewise often occur together. Just how to segregate them into groups is sometimes difficult. Some duplication is warranted. In other words, if malachite predominates, the specimen should go in the malachite group; if the reverse is true, the specimen should be kept in the azurite group.

District or Mine Classification

Occasionally classification by metals may be varied a little and the rule broken. For example, I have in mind minerals from Tiger, Arizona. This mine has produced a very wide selection of lead, zinc, copper, molybdenum, and other minerals. The scores of beautiful minerals from this mine should be sufficient to warrant their being kept together as a district or mine collection. The list of outstandingly beautiful specimens that Tiger has produced includes dioptase, wulfenite, caledonite, linarite, diaboleite, cerussite, azurite, and malachite as well as other less common minerals.

Whether one keeps to the rule of grouping all copper minerals together and similarly all lead minerals together would depend upon the number of specimens that he had from the Tiger district. If he had only a few they should go into copper or lead or zinc classification. As the number increased and became representative of the district, a district segregation could be followed. The same would apply to other districts. One might wish to keep Tri-State minerals together, and the really advanced collector might want all his Franklin, New Jersey minerals in one group.

One series of minerals that is seldom seen in the average mineral collection is the common ores of the metals. I have neglected this collecting to a certain extent perhaps for the same reason that most other people have failed to consider them collectible items. Ordinarily they are not beautiful and, actually, from the standpoint of beauty most of them have no place in a collection unless they are kept separate. One or more boxes could be devoted to ores. Occasionally it is possible to find a beautiful ore mineral—for example, chalcopyrite in Yavapai schist from Jerome, Arizona.

I do not think any mineral collection is complete without a separate color collection. The object is to get as many different colors as it is possible to obtain. Spectroscopic arrangement can be used, but my preference is to assemble the specimens to obtain beautiful effects. Color combinations can be made extremely beautiful.

Another interesting collection is a metals collection. In this type of collection one copper mineral represents copper. There is one mineral for lead, another for zinc, and so on. This type of collection is not only interesting but has a definite educational value. Such a collection has a wide field, especially if the minerals of the rare metals are included.

Perhaps 75 percent of my minerals

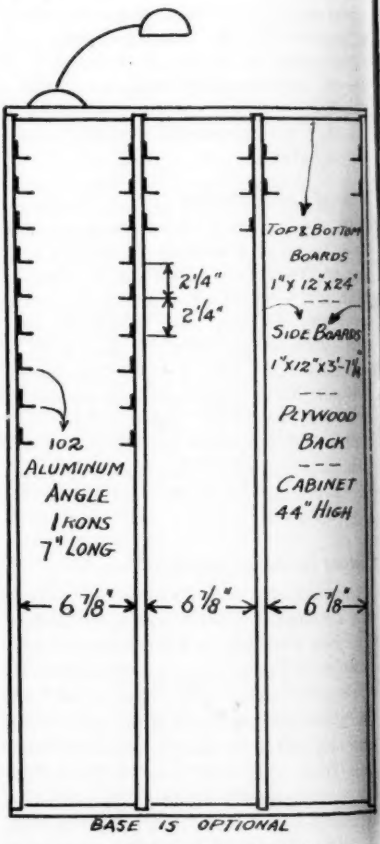
have one side that is more beautiful than the other. To show them to best advantage they should be mounted so as to stand erect or at a slight angle. To make this possible I use a styrofoam mounting. It comes in rather large sheets and can be obtained in various thicknesses, but ¼ inch thick is most suitable. It is easy to cut the styrofoam into rectangles slightly less than 1¾ x 2 inches so that they fit the compartments of the box. It should not be too snug or too loose. The styrofoam base should be loose enough so that it can be easily removed. The styrofoam is soft enough so that the hard minerals can be pushed down into it. The mineral can then be removed, a drop of adhesive can be put into the hole, and the mineral replaced. With delicate specimens it is easy to excavate a little cavity the approximate size of the base. It is surprising how beautiful a mineral looks when mounted in this manner. Your specimens are safe, secure, and a joy to behold when mounted in this way.

Some minerals should not be mounted but placed on a good quality of absorbent cotton cut considerably larger than the 1½ x 2 inch compartments so that it can be turned up on all edges for protecting the specimen against striking the sides of the compartment. White cotton does nothing for a white mineral. In many cases I have used a little piece of black velvet to cover the cotton. I have many Kodachrome slides of my specimens in which I have set the specimen to be photographed in a swirl of satin of a contrasting color. I doubt whether this would be advisable with specimens in the small compartments of the plastic boxes, but at least it could be tried with a color collection. If this is done, care should be taken that the background mounting is not so showy that it detracts from the beauty of the specimen.

A Mineral Cabinet

After one has filled a number of the plastic boxes it is time to consider a cabinet to hold the boxes. I designed and built a very simple and efficient one. It is 12 inches deep, 24 inches wide, and 44 inches high; it holds 54 plastic cases and 972 minerals. A sketch and photograph of this cabinet are shown.

The cabinet consists of four vertical 1-inch boards, a top and a bottom one-inch board all 12 inches wide, and a plywood back covering the entire cabinet. The long boards are placed vertically between the top and the bottom boards and are 6⅞ inches apart. The case now has a top, a bottom, a back,

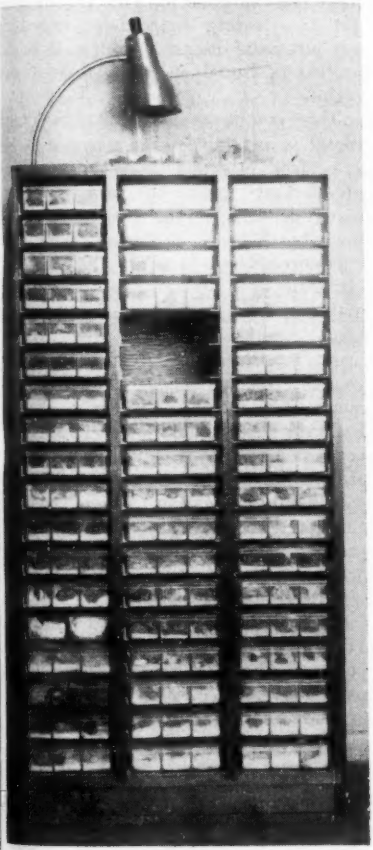


Front view of mineral cabinet to hold 54 plastic boxes for 972 ½x2" minerals.

and contains 3 vertical compartments 6¾ inches wide.

Instead of shelves I got some ¾-inch aluminum angle iron cut into 7-inch lengths. A countersunk screw hole was drilled near each end of the angle iron. Before the various parts of the cabinet are assembled, the angle irons should be fastened to the inside of the boards. These form runners on which to slide the plastic boxes. The runners are 2¼ inches apart.

The case was stained, shellacked and varnished a mahogany color. Since the plastic boxes have covers, the front of the case was left open. The case is a very attractive piece of furniture and can be kept in almost any room of the house.



The finished cabinet.

Identification Cards

Cards 1½ x 1¾ inches can be placed at the upper end of the 1½x 2 inch compartment showing the name of the mineral, its location, and its chemical composition; the last item is always interesting. As the collection increases, each box should have a number affixed to the outside end and an index should be kept in a small notebook. Some collectors like to keep a record of the donor or seller of each specimen, the price, and other information.

Lighting

In successfully displaying specimens, lighting is one of the most important considerations. We use a lamp placed on top of the cabinet. It has a fairly heavy base, a flexible section leading to the hood over the lamp. When you remove a box from the cabinet and place it under the light, you see the real spectacular beauty of your collection.

Conclusion

In many respects a 1½ x 2 inch mineral makes an ideal size. It is amply large to show the real beauty and yet not so large that it becomes inconvenient to examine under the microscope. Superb material this size can be obtained. The writer strongly advises that most specimens be mounted. Probably 75 percent of all specimens have a poor side and a good side; naturally you want the good side to show best, and this can be accomplished if the specimen stands erect, or some crystals can be mounted on a slight incline to show them off to greatest advantage. Minerals with a story on each side should not be mounted. Most minerals are much safer if mounted than if kept loose in the box. A mounted mineral can be easily picked out of the box with

(Continued on page 244)

THE AMATEUR LAPIDARY

Conducted by Captain George W. Owens

Hq. Sq. 384th Bombardment Wing, Little Rock Air Force Base, Jacksonville, Arkansas

Amateur and professional lapidaries are cordially invited to submit contributions and so make this department of interest to all

UNUSUAL STONES

In continuing the discussion on the unusual gems with which we amateurs play from time to time, it is interesting to note that each of us have a few stones that are rare. As a rule these collection items are not shown to advantage in our collections. For some time the author has had three very rare items in a display box (Riker) along with several very common but larger stones. In showing this particular box it was observed that these rare items caused but little comment. Recently in a sudden burst of energy several boxes were rearranged. The rare items were each placed in a properly labeled box by themselves. The single stone in the display box has not failed to cause comment. Perhaps we should all take another look at our collections with a viewpoint of rearranging to better show our rare items.

Several of our unusual gems, while not of the "one of a kind" sort of thing, are worthy of special attention.

Euclase: A silicate of beryllium and aluminum. Closely resembles beryl. Found in light tones of green with a slight blue cast, or blue with a green cast, very pale straw yellow and colorless. Euclase is one of the rare gems and this is reflected in the price of both cut stones and rough. Rough is almost impossible to obtain in the best gem grade but now and then it is available from our mineral supply houses. E. E. Joachim of 1710 Inverness Avenue NE, Atlanta 6, Georgia at one time had several beautifully fashioned pale straw colored stones. As this is one of the rarer colors most rare stone collections do not have it represented. A line to "Jo" might cause him to part with a stone. It wears well, having a hardness above seven. Euclase is found in the Ural Mountains of Russia. My, how I wish there was some way to be more specific! Practically every gem found inside Russia is reputed to come from the Ural Mountains. I'm beginning to get the feeling that these mountains are just solid heaps of gems. It is also found in Brazil in the Minas Gerais region.

This is one material that is always found in crystals—never massive. It has a perfect cleavage and the necessary precautions must be taken. Despite many reports to the contrary, no especially difficult problems have been encountered in faceting this material. Grinding was accomplished with 1200 diamond bort on bronze. The lap was kept constantly wetted by allowing water to drip on it rather than using a sponge; this kept heat to a bare minimum. The angle of 39° was used for both the Crown and Pav. This gave a very nice result. In polishing, Linde A on tin gave a high polish; however, considerable wearing action was encountered in polishing the table, so extra care was used to advantage when polishing the facets. Very slight pressure was used and the stone inspected about four times more often than is customary. To one used to working with problem polishers the polishing of euclase will seem very simple. This stone is always in demand and may be considered as a "must" for any collector of rare items.

Fluorite: A fluoride of calcium. Found every place in the world in just about every conceivable color. Gem grades from U. S., Mexico, England, Africa, and elsewhere. Fluorite is associated

with most metal ores and these ores are probably responsible for the coloration. Fine bi-, tri-, and even quad-color fluorite is found in Mexico. A very beautiful green comes from Africa, while England is famous for its "Blue John". Fluorite is cut in all fashions and while not a lively stone, it is a pleasing one. The generally soft colors give it a nice appearance. To those who enjoy dark light, fluorite is a favorite because of its vivid fluorescence. Cutting of fluorite and polishing gives most people problems that are not generally encountered in faceting. This is because of the hardness factor of only four and the poor toughness and perfect cleavage of this material. It is not recommended as a material with which to learn how to facet. A fine stone is possible and everyone who facets should try their hand at a fluorite. It is extremely heat sensitive. In dopping, it is advisable to warm or pre-heat the stone prior to applying the dopping wax. The author tried warm water with success. The roughly preformed stone was placed in a pan of warm water and allowed to remain about ten minutes when it was transferred to another pan of hotter water for a similar length of time. The stone was then dried and successfully dopped. Others may have a more simple method with which to obtain the same results. Grinding was successfully accomplished on 800 bort and polish was obtained using cerium oxide in a weak solution on a wax lap. It is understood that an excellent polish has been obtained using Linde A on a hard wood lap but this method has not been tried by me. A Crown angle of 43° and a Pav. angle of 42° gave a nice result but angles are not so critical on fluorite. Some stones have been cut with angles in excess of 48° for the crown and these stones also were nice.

The color zoning encountered in the Mexican material makes very interesting stones. It is possible to obtain as many as four colors in a single stone. This material, unlike the general run of fluorite, has sharp zoning bands.

Nearly every mineral dealer will have some type of fluorite available. If you have never cut a fluorite you should try your hand at it.

Iolite: (Cordierite or Dichroite) A hydrous silicate of aluminum and magnesium. Colorless, blue, gray, green and brown, also a pale yellow. Sometimes with a star effect. Completely transparent crystals are rare. Most present-day cutting material comes from Ceylon in the form of water worn crystal fragments. It is also found in the Scandinavian area, Brazil, and in the U. S. Good clean crystals are rare, but extremely large masses have been found which yielded only small stones; however, this was due to the heavy striations present. Iolite has often been termed as "Water Sapphire". Stones of good blue color are in demand. The exceptionally strong pleochroism of iolite is its most interesting feature. While not rare, this stone is missing from quite a few collections because of its reputation of being hard to cut. About all that is necessary to get a good stone is to take care to properly orient the rough so that the best color will be face up. Regular grinding methods are used with a good polish being obtained using Linde A on tin. Crown angles 41°, Pav. at 42° give a nice stone. In cabochons, Linde A on leather gives a high polish. A cute oddity is to cut a cube from this material. When properly oriented each face of the cube will show a different color. The author has a report of iolite found near Guilford, Conn. It is said to be top quality material as is the iolite found near Casper, Wyoming. Anyone having specimens from either locality is requested to write me.

Kyanite: Aluminum silicate. Colorless, black, brown, yellow, gray, blue and green. Found on the European continent, South and North America. New York, Pennsylvania, Massachusetts, and Connecticut have all produced some specimens of this material but probably the best found in the U. S. comes from nearby Spruce Pine, North Carolina. This beautiful pale green material fashions into a delightful and desirable gem. While kyanite is generally cut cabo-

chon style it also adapts to the various faceted fashions. Sufficient has already been written about the great difference in hardness of this crystal (4 to 5 one direction, others 6 to 7). In faceting it presents some problems. Grinding is always with the grain and with very little pressure. Do not grind crystal ends. Do your cutting on at least 1200 bort using little or almost no pressure. Polish in the same manner as grinding using Linde A on a tin lap. The same angles as quartz gives a nice stone. Avoid "bumping" the stone on the lap. A nice stone can be faceted but caution and care must be used. Kyanite is not nearly the problem child it appears to be provided every motion is carefully accomplished.

Tektite: A natural glass. Not hard to fashion. Nearly always in some hue of the color green. It has been called by several other names such as "Bottle Stone" and "Water Chrysolite", and is known to mineral collectors as Moldavite. It is found in Europe, the East Indies, and Australia. Black tektite is also found in Texas. This stone is of interest mainly to collectors. It has all the attributes of glass in fashioning. Polishes with cerium oxide on felt or lucite. Angles for quartz are satisfactory. Appears from time to time on dealers' lists. There should be no particular problem in getting a sample of rough. It is not a very satisfactory stone for jewelry craftsmen but collectors will want one in their box of oddities.

Phenakite: A silicate of beryllium. Lighter tones of brown and yellow, colorless, and a light red are the colors. This gem is always in demand by collectors and good stones of over one or two carats weight are most rare. It is harder than quartz, being very close to eight on Mohs scale. It is found in gem gravels and in pegmatites. Russia, Brazil, and the United States produce this gem. The localities in Colorado are the best known in the states, although it has been found in California. The Colorado specimens have produced gems but it is mainly a source for strictly mineral specimens. Dealers should be able to supply you with a cuttable crystal from Brazil.

Regular cutting practices reward you with a nice stone. Cut both Crown and Pav. at angles of 39°, and polish using 6400 bort on tin. This material is a slow polisher but is not heat sensitive. A very satisfactory polish may also be obtained using Linde A on tin instead of the bort. Both polish slowly. This gem is seldom mounted but finds its way into the hands of collectors. It has a resemblance to both quartz and some topaz but may be positively separated from these gems by an accurate specific gravity test.

Scapolite: (Wernerite) A silicate of calcium, sodium, aluminum—a very "verying" chemical composition. Colorless, reddish, greenish, and gray. Sometimes displays adularescence and a cat's-eye. This rare stone is found in Burma, Madagascar, Siberia, Brazil, Canada, and the U. S. It is associated with garnet, zircon, etc., in metamorphic rocks. Demand is greater than supply for fine stones. While it has a hardness of only 5½ to 6, it is used in jewelry and is popular in Europe. The eye stones of this material are very beautiful as is the faceted stone. No difficulty was encountered in faceting some rough from Madagascar. Rough from other than there and Canada has not been cut by the author. Crown 42°, Pav. 43° resulted in nice stones. A good polish was obtained using cerium oxide on felt and a very satisfactory polish from 6400 bort on tin. Both methods work well. Fine scapolite is a rare item and while rough suitable to your need seldom appears in dealers' hands, it can occasionally be purchased. Grades other than fine faceting do appear and are available. Since this fine stone cuts so readily there is no excuse for not having a specimen in your collection. . . .

More on unusual items will be forthcoming. In the meantime, I wish to thank the many fine people who have written me in the immediate past and a special thanks to those who sent specimens. By now everyone should have

received a reply except the one kind soul who forgot to give his return address.

Please be so kind when writing any of the dealers mentioned in this column, to tell them you saw it in R&M. It only costs a little ink and is really a nice gesture on your part.

The article on Garnets brought quite a bit of response and my mail has been increased because of it. One interesting letter was from Mr. J. T. Leath who operates the DeSoto Trail Rock Shop in Franklin, North Carolina. Mr. Leath tells me that he has been fortunate enough to locate and obtain approximately twenty-five fine Rhodolite Garnet Crystal fragments which average from ten to fifteen carats each. They are very large by today's standards. It is understood that he bought them from a local miner who had mined them over thirty years ago. Mr. Leath, whose address is:

J. T. Leath
Parkway Blvd. Ext.
Elizabethton, Tenn.

has kindly offered to share this find with anyone interested in excellent rhodolite rough. I examined a few of these stones and found them very good to high excellent. A letter to Mr. Leath may be the means of you obtaining a large piece of this rare garnet, but hurry as he has such few pieces. Anyone else having any remarkable rough or cut stones is requested to let me know so that all may share.

MINE FEVER

with apologies to John Masefield
(does anyone read J.M. these TV days?)

I must up to the mine again; to the mica mine on the hill,
And all I ask is a rainy day and good-luck be with me still,
And some fresh blasts and a new dump and no one there a'spying,
And the ground strewn with good rock and specimens a'lying.

I must up to the mine again; for the call of a pegmatite dike
Is a wild call and a clear call that keep me awake at night;
The garnet ledge and the red stones and lepidolite formation,
Is a rare treat and a good chance and a mighty strong temptation.

I must up to the mine again; for the last time I was there
I found the tip of a tourmaline that made me gasp for air;
It had a red core and a white ring and a green, outside jacket;
As I looked in vain for the missing piece my heart made an awful racket.

I must up to the mine again; for that is a rockhound's life;
To the steep climb and remote knoll, as I drag along my wife;
And all I ask is a bit of luck that a rare stone we discover,
And that inner glow that we come to know—when the trip is over.

Far below, the cars whizz by;
Bumper to bumper; eye to eye;
I often wonder where they go?
Maybe, sometime I shall know!

Maybe, sometime I'll belong
To that endless, rat-race throng?
God, Forbid! I'll take my thrills
At the mica mines on the hills.

Fran Schiller
Luke, Maryland

Fossil Department

Conducted by Howard V. Hamilton
1340 Crandall Avenue
Salt Lake City 6, Utah

THE COLLECTION AND IDENTIFICATION OF FOSSILS

By William H. Matthews III
Lamar State College of Technology, Beaumont, Texas

The concluding article of this series will deal with the collection and identification of fossils. Many of the collecting suggestions are similar to mineral collecting techniques, and most rockhounds will already have most of the needed collecting equipment.

WHERE TO LOOK

The greatest number of fossils are found in marine sedimentary rocks such as limestones, shales and certain sandstones. These rocks were usually deposited in an environment that was suitable for living organisms and that was conducive to their preservation after death. The collector should look for localities where these rocks have been relatively undisturbed by heat, pressure, and other changes, and where they have been subjected to considerable weathering.

One of the best places to collect fossils is in a quarry. Here the exposures are relatively fresh yet in some places will have been weathered. Pay particular attention to shale layers in between the limestones. These often yield well preserved specimens and are also a good source of microfossils. Railroad and highway cuts are good areas to collect as the rocks are usually in their original position and have undergone considerable weathering. The banks of streams, gullies, and exposed cliff faces also offer excellent prospects for collecting. Examine the weathered material at the base of the section for fossiliferous rocks and then try to locate the rock layer from which they came. Rockhounds living in coal mining areas will want to check the waste rock around the mine sites. These are frequently the source of many fine plant fossils.

The examples listed above pertain largely to the collection of invertebrate and plant fossils. The remains of vertebrates, particulary mammoths, horses and other mammals, are often found in gravel pits and river terraces.

There are many other places that fossils can be found and the more enthusiastic collectors are always on the alert for such spots.

While most rockhounds are familiar with the ethics of collecting, it might be mentioned that you should be sure to obtain the landowner's permission to collect on his property; and that you close gates and otherwise respect his property.

COLLECTING EQUIPMENT

Most rockhounds already have most of the equipment needed for collecting fossils. The hammer, as always, is the basic tool in the collecting equipment. The writer prefers the stonemason's type hammer with the chisel end, but the pick or pointed type is equally as good. The square end of the hammer is useful in breaking the harder rocks and the chisel or pick end is good for digging, splitting rocks along bedding planes, etc. In addition to the hammer you will need a couple of cold chisels (½ and 1 inch

widths) and a small sharp punch. These can be used to free fossils from hard rocks (such as limestone slabs, etc.) Place the chisel as close to the specimen as possible and tap lightly so as not to cause the entire rock to break. By completely encircling the fossil with a series of light blows the fossil may be freed from the rock matrix with little or no damage. A small paint brush or whisk broom is useful to clean the area around the fossil.

Heavier equipment can include a lightweight sledge hammer, pick, and shovel. The small entrenching picks available at army surplus stores are particularly well adapted to fossil collecting and are light and easy to carry.

A knapsack or similar canvas bag can be used to carry both fossils, equipment, food, etc. In the sack you should have a good supply of newspaper, small paper bags, tissue papers, and possibly cotton. A small notebook, or pad, and a pencil are most important to enable you to correctly label your specimens.

It might also be useful to have a hand lens or magnifying glass (about 10 power), highway or county maps, U.S. Geological Survey topographic maps (if available) and possibly a compass.

HOW TO COLLECT

When a locality that looks suitable for good collecting has been found you should examine the ground very carefully. Look for pieces of rock bearing shell fragments, leaf imprints, or other traces of organic remains. If the fossils have been freed by weathering collecting is much simplified; if not, carefully chip away the surrounding rock or chisel it free as described above. Don't take a chance on ruining a good specimen by trimming it too closely in the field. Final cleaning and preparation of fossils is best done at home.

Be sure that your material is well wrapped and carefully placed in the collecting bag. Light fragile specimens should be wrapped in tissue paper or placed in cotton in small plastic vials or match boxes. These should be placed in the bag where heavier material will not crush them.

Last, but certainly not least, be sure to record the collecting locality in your notebook. Place a label showing all geographic and geologic data with each sack of material from each locality. It is best to keep material from different localities in separate paper bags. If you are using county or topographic maps mark the locality on your map. *A fossil without a locality is hardly worth the paper it is wrapped in.*

The above instructions apply largely to invertebrate and plant remains. Special precautions and techniques must be employed in collecting vertebrate remains. Amateur paleontologists who find interesting and well preserved accumulations of fossil bones should not disturb them as fossils of this sort are easily damaged. In case of such a find it would be wise to notify the nearest museum, college, university, or the State Geological Survey in your state capital. If possible include a small portion of bone to show what you have found. In sending in this material be sure to give the exact location where the fossil was found. It would also be helpful to include additional information such as the geologic age of the rocks, type of rocks that remains were found in, etc.

As a final suggestion we might add that you should take only what material you need for your own collection and leave some for the next fellow.

IDENTIFICATION

The beginning fossil collector is usually content to know if his specimen is a clam or snail or a fern or a palm leaf. As the collection grows, however, you will want to know the scientific name of the fossil. When you first start to identify your specimens you may find it helpful to show them to a geology professor if you are located near a college. Many high school science teachers are also familiar with fossil remains. If you live in or near a town that has a museum compare your fossils with the museum fossil collections and ask the museum workers for advice. In addition to the above sources of help don't forget local

professional geologists or the geologists of your State Geological Survey. They can also guide you to the fossil literature of your area.

If you are fortunate enough to live in a state that has issued a "popular" or non-technical publication on fossils these will be your most useful source of information. Ohio, Illinois, Missouri, and New York have published books of this sort. The writer is in the process of writing such a book for Texas, and several other states have similar books in preparation. Drop a note to the Director of your State Geological Survey in your state capitol to see if plans are being made for such a publication in your state.

When you have found the books or journals describing the fossils in your area carefully compare your specimens with those illustrated in the literature. If possible refer to your state geologic map for an accurate geologic location, and then check to see what fossils have been reported from the formation.

After identifying the material it should be systematically arranged and displayed. Each fossil should be numbered and the fossil number should be put on the label in the tray with each fossil. The label should indicate the specimen number, scientific name, geologic formation the fossil was collected, the date collected, and name of the collector.

The addition of these specimens to the rocks and minerals in your cabinets will provide the viewer with a comprehensive, educational, and interesting earth science display.

We are sorry!

Editor R&M:

I wonder if anyone had his letter returned or received no reply because of the error in the address in line 3 on page 110 of the March-April number of R&M?

It should be Minnesota instead of S.D. The specimens were collected in S.D., but our mailing address is Minnesota.

Two letters with the incorrect address were received here but others may not have been delivered. Would you please publish the correction? Thank you.

Lee E. Payne
Rt. 1, (Eagle Lake)
April 1, 1958 Willmar, Minn.

Mineral post cards in color

For those who may like to obtain a supply of mineral post cards in color, we recommend Reo N. Pickens, Jr., 610 N. Martin, Waukegan, Ill. Mr. Pickens is a photographer, whose hobby is mineral collecting. A recent letter from him reads:

"I enclose one of my latest ideas, and that is post cards of minerals. I am having two more kinds made up, one of wulfenite from Mexico and another of stilbite from New Jersey. I have been selling them to rock dealers here about 30 for one dollar."

The card received showed two half-sections of a Keokuk, Iowa, geode—in color and very, very nice

FRANK DUNCAN FUND

In the Sept-Oct and Nov-Dec 1957 issues of R&M, there appeared articles relating to Frank Duncan Fund. (Mr. Duncan is an aged mineral dealer who is up against it financially). We had hopes of raising $500 to be sent him as a nice Christmas present.

Only $185.10 were raised and this was sent him, Dec. 16th—not as a gift but as a loan (at his request).

Since then $23.00 more has been received, as follows:

Francis D. Emery, Old Orchard Beach, Me.	$5.00
Roy M. Fitts, Yarmouth, Me.	2.00
Fran Schiller, Luke Md.	2.00
Mrs. John J. Tamburri, Morganville, N. J.	2.00
Robert Wilken, Red Hook, N. Y.	2.00
Anonymous (Ohio)	10.00
Total	$23.00

We will hold the Fund open for a few weeks in the hope that more contributions may be received.

Club and Society Notes

Attention Secretaries—Please submit neat copies. Give dates and places of meetings. Check names for correct spelling.

East

The New York Mineralogical Club, Inc.

The meeting convened at 8:00 P. M. January 15, 1958 in room 403, Schermerhorn Hall, Columbia University, New York City, with Joe Stromwasser presiding in the absence of Prof. Daniel T. O'Connell.

The Membership Committee reported that Beatrice M. Gosling of New Jersey and Deborah F. Duffy, Carolyn Weiss, Mitchell A. Bogen, Robert H. Eisenhart, Stephen Stoller, and Ralph Candler, all of New York were elected as new members to the New York Mineralogical Club.

Dr. Stenbuck's motion of December 18, 1957 not to read the speech abstracts of our guests was passed with little opposition. The abstracts, however, when available, will be sent to ROCKS AND MINERALS along with the minutes as was previously done.

Joe Rothstein reported that Freda Thomas of the Pine Tree Gem & Mineral Club of Roxbury, Maine, has written of their finding smoky quartz crystals, some as large as 5 x 6 inches, petals of crandelite, some white on clear quartz crystal slabs, others brown, coated with marcasite or interspersed with pyrite cubes. These were found at the Mexico road cut and there are ample specimens for trading.

The speaker for the evening was Prof. C. Wroe Wolfe of Boston University whose subject was "Mineral Collecting from Noranda to Mesabi. Prof. Wolfe took us on a geological trip through Sudbury, Cobalt, Ontario, Porcupine mine and parts of Michigan. The talk was illustrated with colored slides.

February 19, 1958, Meeting

The meeting convened at 8:00 P.M. in room 403, Schermerhorn Hall, Columbia University, with Dr. Daniel T. O'Connell presiding. The first order of business was the reading and accepting of the minutes for the January meeting.

Prof. O'Connell read a letter from Bertram T. Butler who is kept busy between his Arts and Science Club and his picture taking in Florida. Another letter was read which was received from Roy E. Clark, Chairman of the Junior Activities Committee of the Eastern Federation. He wanted to know if the New York Mineralogical Club has Junior members who are interested in entering a display in a Junior Division of the Eastern Federation annual show at Asheville, North Carolina, on August 7-9, 1958. We do not have any Junior members, interested or otherwise.

The Department of the Interior sent us a form to fill out in regard to new mineral localities. Joe Stromwasser is looking it over.

The Membership Committee had no new members to propose, while the Field Trip Committee promised to come up with a proposal at the March meeting for a Spring trip.

Alan Mitchell revealed that Dr. Strund had a new book published in Germany that is considered to be the latest thing in mineralogy. Joe Rothstein cited an interesting display in a store window on Maiden Lane and Broadway showing cultured emeralds in several stages of crystallization.

The speaker of the evening was Prof. Alonzo Quinn of Brown University, Providence, Rhode Island. whose topic was "Minerals of Rhode Island." Prof. Quinn's lively talk was accented with interesting mineral specimens from the Rhode Island area.

Monroe L. Weiss, Sec.
65-30 108th St.
Forest Hills 75, N. Y.

Queens Mineral Society

January 27, 1958: The entire meeting was devoted to a talk by Dr. Lester Strock, Physics Laboratory, Sylvania Electric Products, Inc. on "Zinc Sulfide: Crystal-Mineral-Phosphor". His talk was profusely illustrated with many unique devices. Of interest was the proposed use of Electroluminescence at very low cost and great efficiency for lighting.

February 24, 1958: At this meeting which

was held at the customary meeting place, 85-01 118th Street, Richmond Hill, Long Island, N.Y., the following were elected to office: Al Green, President; Dave Hammer, Vice-President; Pete Revere, Treasurer and Vicki Touhey, Secretary. The following are Committee Chairmen: *Membership,* Hazel Robertson; *Field Trip,* Dave Hammer and *Program,* Lou Roth. G. Hank Hahs, Ruth Warne and Robert L. Warne became members and were welcomed into the Society. The balance of the evening was taken up with a discussion on "Common Rock Making Minerals". Curt Segeler, Al Green and Ted Fredericks led the discussion and answered the many questions put to them by those present.

Vicki Touhey, Secretary
87-16a 214th Street
Queens Village, L.I. N.Y.
HOllis 4-4494

3-2-58

Rockland County Mineral and Gem Society (N. Y.)

Over forty members and guests attended the first meeting of the year held at the Finkelstein Memorial Library, Spring Valley, N.Y., on January 31, 1958.

The program was given by Mr. Thomas Wilfred, Jr., of West Nyack, a member of three years standing, who gave as his subject, "Diamonds." He gave us a very interesting and informative lecture on not only the gemology and the importance of the cutting of the gem, but he explained how the diamond market was strictly controlled and where it was operated from, being New York City; London, England; and Amsterdam, Holland. After his talk he passed through the audience some rare specimens of green and pink diamonds, which we were very privileged to see as very few people have seen these at first hand.

After the program. refreshments were served. Our next meeting will be hold on February 28, at the Finkelstein Library at 8:00 P.M. Visitors are always welcome to our meetings.

Mrs. Marguerite Collyer.
West Nyack, N.Y.

Capitol District Mineral Club

A singular and unique distinction has become the responsibility of the Capitol District Mineral Club of Albany, New York. At a meeting in the State Museum on Thursday evening, March 6, 1958, it was announced that the Board of Regents had that day formally voted to grant a provisional charter to the Capitol District Mineral group in order to incorporate and affiliate with the University of the State of New York, State Educational Department. This is to be a non-stock corporation organized and operated exclusively for educational purposes, and to:

"a) promote and organize the study of minerals and allied sciences;

b) co-operate with educational and scientific institutions in order to bring about a better and more general understanding of earth sciences;

c) provide a program with suitable speakers for meetings;

d) sponsor, direct and assist in the planning of excursions to mineral localities and places of geological interest, and

e) co-operate with organizations whose purposes are similar to those herein stated."

This is the first time such incorporation has been accomplished by any amateur mineral group in New York State. Dr. A. C. Worth, Jr., Chairman of the Incorporation and Constitution Committee, expressed the club's pride in achieving this recognition and stressed the possibilities of worthwhile service resulting from the affiliation.

President Ralph Lapham, of Glens Falls, suggested the mapping of area mineral fields as a first project for the year. The maps are to be keyed to U.S. Topographic maps and will show main roads and access roads to mineral localities. When completed, the maps will be placed on file with the New York State Department of Geology, and will be available for anyone wishing to use them.

Dr. John Broughton, New York State Geologist, was the enthusiastically received speaker of the evening. Talking on Geologic-Topographic Mapping, he held the group's undivided attention as he presented basic information on how such maps are made. Naturally, untrained amateurs can not expect to master the detail as exemplified in the Paradox Lake Section (which has already taken eight years of survey and is a masterpiece of careful detail) but Dr. Broughton's explanation of mapping technique will certainly assist members in making acceptably accurate maps of the areas they plan to cover.

When the meeting adjourned, interest centered on two special exhibits arranged for the evening; one, a lapidary display

of beautifully cut and polished stones from the extensive collection of Jerry Lapham, former club president and well known area collector; and the second, an educational exhibit of Granite and its component minerals set up by Dan Libeg, collector and student in the Glens Falls Adult Education class conducted by Elmer Rowley, outstanding "professional" amateur mineralogist who has gained earned distinction in his chosen hobby. Both displays appealed to the heterogeneous interests of the group. It was noted that many of the finished pieces in Mr. Lapham's lapidary display were the expertly cut and polished results from specimens gathered on the field trip to Gouverneur last summer . . . a trip which will be long remembered by those who know details of that now legendary expedition.

Altogether, the March meeting of the club was considered an especially interesting gathering. It was a mild evening, weather-wise and over eighty (80) attended the session. Enthusiasm appeared to be running high in anticipation of important activities during the coming year. Ralph Lapham, who succeeds his brother as the 1958 president, is an able and far-seeing executive. Under his capable leadership . . . and with the new corporate organization to stimulate an urge toward achievement . . . the Capitol District Mineral Club is destined to fulfill the requirements of its new charter.

The past several months have been severe with extremely heavy snows and inclement weather which has forced the collector into "temporary retirement." However, constant planning and preparation with a strong dash of anticipation has made the winter endurable and it is safe to assert: "when ye weather breaks, neither rain, nor sleet, nor hail, nor storm of day shall detain this group from their appointed field trips." It looks like a very rewarding year for the Capitol District Mineral Club of Albany.

Pauline Smith
Co-Chairman, Publicity Committee
5 Foster Avenue
Glens Falls, New York

Fulton County Mineral Club

Jan. 6, 1958—

The guest speaker was Prof. Lloyd Willcox, Science Instructor in the Johnstown High School who spoke on "High School Science in Relation to Present Day Development."

John McCrevey showed a collection of minerals of unusual types and gave brief explanation about each.

January 13, 1958—

Andrew Palmer, the president, reported generally on joining the Eastern Federation and benefits to be derived from such an action. Lewis Valachovic was appointed to check on club and individual dues.

Bob Bedford showed slides of a few of the field trips taken last year and displayed outstanding mineral specimens collected on those trips, also specimens from other sites. The specimens proved that the trips were very profitable.

Allen Niles displayed a nice assortment of gem stones.

January 27, 1958—

We gained a new member, Mrs. Roland Van Tassel.

Nominations will be presented and new officers elected at the next meeting, February 10th.

Catherine Streeter, the secretary, gave a resume of the 1957 field trips.

Catherine Streeter
386 Bleecker St.
Gloversville, N.Y.

Syracuse Gem & Mineral Club

A regular meeting of the Club was held on Friday evening, January 10th, 1958, at 8 p.m. at Lyman Hall, Syracuse University, Syracuse, N.Y. Past president Richard L. Sylvester presented two sound movies in color, one titled "Petrified River" which depicts the processing and industrial applications of uranium. The other film, titled "Lead from mine to metal," depicted the sequences in the mining of lead ores.

A good attendance was present—over 53 members and visitors. The movies were enjoyed by all.

R. L. Sylvester
145 Crestview Dr.
Syracuse 7, N.Y.

Geological Section BSNS

The Geological Section of the BSNS at their February meeting heard a talk given by Dr. William R. Kenny, Assistant Professor of History at Canisius College, Buffalo, N.Y. Dr. Kenny covered the Geological Background of the Sonora Mining District of California. Then followed excerpts taken from diaries of some miners, with a description of the hardships they endured in their quest for gold.

The March meeting was devoted to an informal evening of trading, selling and

buying. It proved to be, as usual, a well attended social evening.

The April meeting will have as its speaker, Mr. Charles Jacobs, Ceramics Engineer at the National Lead Company. His topic will be The Economic Heavy Sands of Florida.

T. J. Czerniejewski, Secretary
Geological Section,
Buffalo Society of Natural Sciences
Humboldt Park,
Buffalo 11, N.Y.

Maine Mineralogical & Geological Society

The Society meets the last Friday of the month except during July and August at the Beach Museum, 1245 Forest Ave., Portland, Me. Visitors and prospective members are welcome.

During the past summer we made several trips to such places as the perennially favorite B.B. #7, Palermo mine, No. Groton, N.H.; Hurricane Mt., Conway, N.H.; Lovejoy pits, Conway, N. H., and others.

Leon A. Carpenter,
136 Main St.,
Gorham, Maine

Keene Mineral Club

In the past year our club has had several very interesting talks. Dwight Carle of the K. T. C. gave a talk on the geology of our State. He showed the different formations on colored slides with specimens of the Quincy granite, Conway granite, Orfordville slate, Amonousic lava, Bethleham gneiss, Partridge and Clough formations and the Littleton schist.

A second talk Mr. Carle gave us was on Mt. Monadnock, with slides to show the rock formations and strata.

We had a talk with colored slides on a Western trip taken the summer of 1957 by the Wetherbees. Also a talk with colored slides on St. Thomas Island, given by Mr. and Mrs. J. C. Dort.

The Reverend Merle Corbett invited the club to his home in Acworth for a picnic and meeting and gave a talk on hunting geodes in the Dugway Mts. of Utah. Also of a mineral hunting trip to Colorado.

We have had programs on copper minerals, minerals used in medicine, fluorescent minerals and on specific gravity. Contests on several different minerals.

Our annual February meeting was held at the Senior Center with the members putting on the dinner. At this meeting we had two guests from the Boston Club.

For the April meeting we will have the film, "The Petrified River—The Story of Uranium."

Mrs. Julian Wetherbee
22 Wheelock St.
Keene, N.H.

Westminster Mineral Club, Westminster, Mass.

The highlight of the past year was the donation of a small building by Mr. and Mrs. Vance Butterfield for the Club's use. From September to December the men worked faithfully one night or more each week making necessary interior changes, one of which was the removal of two walls to make one large room. A new ceiling was put up, outside walls finished and a new floor laid. Mr. and Mrs. Kaino Oinonen donated an oil-burning range and each member a chair. Mrs. Toivo Puranen made curtains for the windows. Two sets of shelves have been built for displaying the Club collection and others will be added as needed. Meetings are now held at the Club house on the fourth Thursday at 7:30 P.M. Visitors always welcome.

The Club would be very happy to receive specimens from other sections of the country if anyone reading this cared to send them along. We would like to have something from each state, and of course foreign countries as well. We hope to build a collection of educational value, not just a hodge-podge of specimens.

Field trips were taken to the following places:

Chester, Vt., Carlton Talc Mine

Fine ¾" pyrite cubes, large magnetite octahedrons and some gemmy talc as well as the usual talc and actinolite.

East Deerfield, Mass. Cheapside Trap Rock Quarry.

Nice fluorescent calcite, good datolite xls in trap rock, one specimen of sphalerite in a vein of calcite, chalcedony, prehnite, barite and chalcopyrite.

Loudville, Mass. Lead Mine.

After much digging several members found beautiful specimens of wulfenite (for this locality) and one member some pyromorphite on quartz xls that is really something under the microscope. Galena, sphalerite, quartz xl masses and a little cerussite were found.

Warwick, Mass.

Epidote, garnet, quartz and magnetite in combination, epidote xls in matrix, loose quartz xls. fine-grained massive magnetite and micaceous hematite.

Diamond Hill, R. I.—Quartz xls of various tints on pastel-colored matrix.
Cumberland Hill, R. I.—Cumberlandite, a titaniferous-magnetite, epidote, magnetite xls, and slate.

Westminster, Vermont.

Claystones of many shapes and sizes. These contain scattered flakes of mica which make them sparkle in the sunlight.

Westmoreland, N.H. Wise Mine.

Green fluorite—fluoresces nicely under long wave,—a few octahedral specimens, quartz xl groups and singles.

Springfield, N.H. Playter Mine.

We rode as far as we could over a rough woods road but still had a long hike. Nice plumose mica, black tourmaline xls in smoky quartz, perthite feldspar, a little aquamarine, mica xls and large feldspar xls. Two of 50 lbs. each were carried out.

So. Acworth, N.H. Beryl Mt.

Blue-green and golden beryl, some xls in matrix. Rose quartz, books of muscovite mica and feldspar. By previous arrangement we visited the Rev. M. E. Corbett in Acworth in the afternoon to see his collection which contains some of the rare minerals. It was a very hot sticky day so the ice cold lemonade and cup cakes he served us were very refreshing.

Fitchburg, Mass. Rollstone Granite Quarry.

Nice black tourmaline xls, some beryl and a few specimens with allanite rods.

Our Study Program of "The Nature and Uses of the Natural Elements" has been very interesting and informative. We sent a surprise package to a woman in Michigan who doesn't have a chance to do much collecting but is anxious to build up a collection. Two auctions have been a lot of fun and have increased the Club treasury. Our Club was three years old in February. We are looking forward to another year of pleasure with Nature's great book—The Rocks.

Mrs. Vance Butterfield, Cor. Sec'y.
Minott Rd., R.F.D. 2—Box 90
Westminster, Mass.

Franklin Mineralogical Association

Membership in the Franklin Mineralogical Association continues to grow daily. Among the recently enrolled members is Mr. Peter Zodac, Editor of ROCKS AND MINERAL MAGAZINE and we extend to him a most hearty welcome.

From the flood of mail which has been received by the Association since the announcement appeared in the January-February issue of ROCKS AND MINERALS MAGAZINE, it appears that additional information should be presented to prospective members seeking admission to the Association.

First, there are no regular meetings to attend in order to retain membership. Secondly, collectors holding membership in other mineral and gem societies are not prevented from seeking and gaining membership in the Franklin Mineralogical Association. Third, one of the prime purposes of the organization is to disseminate information about the minerals, the history and the geology of the Franklin-Sterling Hill mining district of Sussex County, New Jersey.

Since it can be expected that a great many collectors who frequent the district in quest of mineral specimens will not avail themselves of the services of the Association, it shall nonetheless be a policy to inform collectors of any changes of policy governing the practice of collecting of minerals on the dumps at Franklin, in particular, at the Buckwheat dumps. Such information as can be published in existing, popular mineral magazines, such as ROCKS AND MINERALS, shall be rendered.

It has recently come to the attention of the Association that there does exist considerable ground for liaison work between the townspeople of the Franklin district and the mineral collectors who frequent the collecting areas there. It is the hope of the Association that it may in no small way act to improve conditions for all concerned. It is hoped that the Association may act as a good will emissary.

Recent information has been obtained governing the policy of collecting at the Buckwheat dumps. Originally it had been understood that the permits required were needed in cases where there were individuals under the age of 21 who were included in the mineral collecting party. A death at the dumps in recent years prompted deep concern by borough officials and with good cause. However, as far as the Association has been able to learn to date, it is now imperative that anyone, adult or minor, seeking admission to the Buckwheat dumps, must first secure permission from the Chief of Police at Franklin. This action apparently has been prompted by a number of thefts upon the automobiles parked at the dumps by employees working in the plant across the street from the dumps. These actions tend to cast a reflection upon the entire mineral collecting fraternity. Collectors, Association members

or not, are therefore urged to comply with the wishes of the local officials and to extend to them their full cooperation.

As far as the Association knows, there is no permission necessary in order to collect at the Parker dump.

The Association intends to include in its first annual publication, *Franklin Mineral Digest*, not only the first of a series of reprints from the much coveted Palache report ("The Minerals of Franklin And Sterling Hill, Sussex County, New Jersey", Geological Survey Professional Paper 180, 1935) but also the first of a series of reprints from a report dated 1908, Franklin Furnace folio, no. 161 which contains considerable valuable information omitted in the 1935 report. Several other noteworthy papers and reports shall also be reprinted.

It should be pointed out that the two dollar subscription fee or dues is intended solely to defray the printing costs of the Mineral Digest. Members sending in their subscription-dues fee should make check or money order payable to: Franklin Mineralogical Association.

Gerald Navratil, Sec.-Treasurer
Franklin Mineralogical Association
Box 70, RFD #2, Middleburgh, N.Y.

North Jersey Mineralogical Society

The North Jersey Mineralogical Society held its February meeting on Thursday evening the 13th, in the Public Library at 250 Broadway, Paterson, N.J. Dr. A. J. Delario presided. The meeting was well attended and visitors from Westwood, Hillside, Boonton, Dover and other localities were present.

Just preceding the program Dr. Delario read an amusing article which Miss Alypia Wendt, Secretary, had brought to the meeting. Taken from a book entitled "Journey Through Northern New Jersey"—published about 1850—it told of collector's visits to the Franklin Mines. Strange to relate, the collectors were just as avid then as they are today.

The guest speaker was Mr. Robert W. Metsger, Geologist for the New Jersey Zinc Company, who spoke on the "Mineralogy of the Sterling Hill Zinc Deposit". As he stated, the Mining Company is interested in this area particularly from a geological standpoint in their search for deposits of commercial value.

Both the Franklin and Sterling ore deposits were vast crucibles or retorts in which chemical reactions took place. Radioactive carbon determinations at Columbia have shown these deposits to be over 1,250 million years old. The richest zinc deposits in the world were in this area. A study of these minerals in relationship to each other is important since this forms a chemical record of how they were formed.

The ore body at Sterling is about 2,000 feet long and extends underneath the surface about 2,500 feet. A large part of it is about 2,000 feet below sea level. The ore body plunges down at a 45 angle, and is composed to a great extent of franklinite, willemite and zincite. Part of the vein is composed of black willemite, which is due to minute inclusions of the franklinite. Red and brown willemites are found at Sterling, whereas most of the willemite at Franklin is green. What is the relationship between black and brown willemite? why is Franklin willemite green? how did these minerals get there?—these and many other questions of a technical nature were discussed by Mr. Metsger. He also projected slides showing, through polarized light, the typical colors and formations of many of the minerals found in this area.

Interest in Mr. Metsger's talk was keen, and many questions were asked by the audience.

Another feature of the evening was a display of Franklin and Sterling minerals, and many rare and beautiful specimens were brought from member's cabinets for the edification of the group.

Louise W. Borgstrom
Publicity Chairman
Elcock Ave.
Boonton, N.J.

New Jersey Mineralogical Society, Inc.

We meet the first Tuesday in the months of September to April from 8:00 to 10:00 P.M. at the Plainfield Public Library, Plainfield, N.J.

Our December speaker was Dr. Meredith E. Johnson, State Geologist, Department of Conservation & Economic Development, Trenton, N.J. also Corresponding Member of our Society. He spoke on the recent mineral developments in New Jersey. First, the adverse such as the closing down of the N.J. Zinc Company at Franklin, N.J., and suspension of operations at Ogdensburg, N.J. Second, the promising aspects such as the Ringwood, N.J. Iron Mine is being dewatered; the Edison, N.J. Iron Mines are being drilled for a new ore body. He mentioned that the U. S. Geological

Survey and its Laboratories are ever willing to be of assistance to those seeking vital information.

Our January speaker was Mr. Henry E. Millson, Cyanamid Company, Bound Brook, N.J. and a member of our Society. His subject was Fluorescence. Mr. Millson is an authority in this field and his talk was most interesting, the demonstrations spectacular.

The door prizes donated by our Secretary Leigh Thompson were three copies of ROCKS AND MINERALS—Golden Nature Guide, #499.

The February Meeting was our Lapidary Meeting, including an exhibit of cut and polished gems by the members. The speaker was Jules Andrus, Bell Telephone Laboratories, Murray Hill, N.J., artist and member of our Society. His subject was Gem carving and Miniature Painting. He gave a brief review of methods used from before the 9th Dynasty up to the present day. He explained Cameos are raised carving and Intaglios are worked in reverse, viewed from the opposite side and always worked in clear quartz, the subjects mostly being animals. His slides showed the equipment he used—the abrasive being diamond dust, and also many of the Miniatures he had made. Everyone was impressed with the perfection and beauty. The heads of the dogs were so realistic their little noses seemed "wet".

Our Lapidary Exhibit was noteworthy. Many cut and polished cabachons, mounted gems, earrings, necklaces, bracelets and silverware. A fluorescent display of flats in the shape of butterflies. Intaglios by Jules Andrus and over 50 Cameos from Wilfred Beveridge's collection. The door prize was large quartz xls coated with scalenohedron calcite xls from Ouray, Colo. and was won by Anthony Cook.

Visitors are welcome at all of our meetings.

Mrs. Alexander F. Knoll
Publicity & Public Relations
532 Edgar Road
Westfield, N.J.

Delaware Valley Earth Science Society

A regular meeting of the Society was held at the Woodbury, N.J., high school Wednesday evening, March 2, 1958. Though the meeting was devoted to lapidary, trades and swaps were in order.

Edward W. Zukauckas, M.D.
304 E. 2nd St.
Moorestown, N. J.

Central Penn. Gem & Mineral Club (Harrisburg, Penn.)

On February 5, 1958, the newly organized Central Pennsylvania Gem and Mineral Club met and elected a slate of officers as follows:

President—Ermon Mayfield
Vice Pres.—W. T. (Bill) Baxter
Asst. Vice Pres.—Ernest Bostelman
Treasurer—Ammon Schwartzbach
Secretary—Mrs. Ammon Schwartzbach
Asst. Secretary—Mrs. Walter (Pat) Dundorf, Jr.

Mr. Baxter and Mr. Bostelman will be in charge of Programs and Field Trips.

As soon as the weather permits there will be field trips to mines, quarries and other collecting places. Later we plan to have exhibits of specimens collected, show films and plans for junior members. As we are amateurs, we would welcome ideas and suggestions anyone would be kind enough to send in.

Meetings are to be held on the 1st Wednesday of each month at the State Museum, Harrisburg, Penn. Visitors are always welcome.

Mrs. Ammon Schwartzbach, Sec.
2239 Logan St.
Harrisburg, Penn.

South

Central North Carolina Mineral Society

I was nominated to send ROCKS AND MINERALS a write-up concerning the first meeting of the year 1958 of our Mineral Club. . . .

The Central North Carolina Mineral Society, Inc., assembled for its first meeting of the year on January 8, 1958 at Page Hall, N. C. State College, Raleigh, N. C., with an attendance of approximately forty Rock-Hounds. The meeting time has been designated as the first Wednesday of each month at 7:30 o'clock in the evening.

Following a business period, discussion of future field trips, and introduction of guests, "pebble-pups" and new members, the time arrived for election of officers. Mr. Lloyd A. Allison of Durham, N. C. was elected President; Dr. E. L. Miller, Jr. of the N. C. State College Geology Department, Raleigh, was elected Vice-President

and Mr. Orville K. Barnes of Raleigh was chosen Secretary-Treasurer.

After election of officers for the year 1958, and annual dues set at $3.00 annually, Lapidary was discussed at some length. Displays of cut Gem Stones and Cabochons were exhibited by four or five members including Mr. Briggs and Mrs. McCrary of Raleigh, Mrs. Ralph Duffel of Henderson and Mr. Alton Price of Durham. Dr. Miller announced the fact that he was going to sponsor a Lapidary class in the Geology Department of State College, and if any were interested the fee would be $20.00 per person to defray expenses. There were about fifteen who signed up to take the course.

Following adjournment of the very enthusiastic meeting about 10:30 P.M. many members lingered awhile to go into the fluorescent room while others marvelled at the beautiful displays of minerals on display in the Geology Halls of State College. while others moved along slowly toward their cars on the outside discussing valuable new finds, etc. until the meeting had finally dispersed about 11:00 P.M.

J. Alton Price
D–1D University Apts.
Durham, N. C.

Miami Mineral & Lapidary Guild

The Miami Mineralogical and Lapidary Guild held its December meeting as a field trip to a location some fifty miles west of Miami, Fla., at a place where an artificial lake has been dug.

From the spoil-banks we gathered many kinds of fossil shell, some as individual shells, some in conglomerate mass, and chunks of a cement-like matrix containing numerous small shells. Parts of this material will fluoresce yellow.

This material should not be confused with Tampa Bay agatized coral.

At lunch time we held a door-prize raffle and rock-swap session.

Leo A. Hauser, Sec.
Box 265, Riverside Sta.
Miami 35, Fla.

Pinellas Geological Society

We wish to announce the formation of a new rock club. We will call our group the Pinellas Geological Society and will hold our meetings in Clearwater, Fla., but membership is opened to all. The officers are:

President—Miss Ellen Happe, 125 Harbor Bluff Dr., Largo, Fla.

December 1957 field trip to a location 50 miles west of Miami, Fla. Miami Mineral & Lapidary Society.

Vice Pres.—W. R. Olsen, Rt. 1. Box 537, New Port Richey, Fla.

Sec-Treas.—Mrs. Galen Fox, 706 N. Glenwood, Clearwater, Fla.

Meetings will be held monthly but the exact time and place are yet to be determined. Visitors may call or write Mrs. Fox for details.

Visitors are welcome at all times.

Mississippi Gem & Mineral Society

We organized in October, 1957, with about 15 charter members. At the present time we have over 50 members. The name of the club is the Mississippi Gem and Mineral Society. We meet the 4th Friday of each month in the Science Hall on Millsaps College campus, Jackson, Miss. The club is incorporated as a non-profit organization. A charter and by-laws are to be ratified at the next meeting. We have good programs and field trips will be taken when the weather warms up. All in all we have a very enthusiastic group here in Jackson, Miss.

Wendell B. Johnson
Gem & Rock Shop
Box 9921
Jackson, Miss.

Mid-West

Minnesota Mineral Club

Meetings are held monthly, November through April, at Midway YMCA, 1761 University Ave., St. Paul, Minn.—8:00 p.m., 2nd Friday. Secretary, Doris Erickson, 785 E. Hoyt Ave.. St. Paul 17, Minn.

Arizona

Mineralogical Society of Arizona

When Arthur L. Flagg went to New York on business after his first trip to Arizona he tried to pay for a meal with a five-dollar gold piece. The restaurant owner called a cop. They all went to a nearby bank, "To see," said the cop, "if the gold piece is any good." Flagg called for the President whose answer was, "Son, that's the only kind of money Uncle Sam has that *is* any good." The restaurant man's apologies were profuse, topped off with, "Young man, whenever you come to New York you can eat all you want at my place—free."

Flagg, a well known mining engineer, came to Arizona 52 years ago as assayer for the Esmeralda Copper Co. near Cherry. At the February 7th meeting of the Mineralogical Society of Arizona, our Mr. Rockhound related to a full house many of his early experiences in Arizona; how he bargained with a Zuni Indian at a railroad stop for turquoise, how he discovered what "two-bits" meant and a host of other incidents.

At Ash Fork he made an interesting discovery. A banner stretched across the one street opposite a restaurant proclaimed, "Regular meals 35¢, Square meals 50¢, Hellofabust $1.50." It seems that the main dishes were the same but for the square meal you had pie instead of corn-starch pudding and for the Bust six raw oysters, out of a can, served on half-shells old enough to be fossils, were the reason for the high price. Generally good meals were 35¢ and a big steak with vegetables and dessert only 65¢.

There were many small mines in Arizona in those days being developed. There were several very large ones. Everywhere the power was steam. In the small mines drilling was by hand. Heavy steam drills took two men to set up and the exhaust was suffocating.

Sunday excursions from Prescott to Crown King over the thirteen switchbacks, the longest switchback railroad in the United States, was an adventure. Something more about railroads: In those days you could ride a freight train legitimately by paying the regular fare and signing a foot-long waiver to absolve the company of claims for damages. Dead tired after a forty-eight hour sampling job near Wickenburg, he rode a caboose to Phoenix, sleeping on the sample sacks for a pillow. At Phoenix, the train stopped just west of the Capitol in the yards. There was nothing to do (it was after midnight) but hide the samples and hike to town. Next morning the livery stable where the Luhrs Building now stands would not rent a rig until Mr. Luhrs came to vouch for the stranger who hid his rocks in the mesquite thicket.

Kodak pictures projected on the screen showed a much different Arizona from what we know today. The dusty unpaved approach to the Capitol, a wagon loaded with hay in front of the County Court House at the curb while the horses were being shod in Frank Wood's shop on Jefferson,

and panoramic views from the Adams and Commercial (now Luhrs) Hotels proved that Phoenix has come a long way since 1906.

Not everyone has an Osage Indian from Oklahoma to guide him around Arizona's Grand Canyon. The Indian invited the Perry Stufflebeams to eat at his picnic table. From there he drove them three miles to the start of the Kaibab Trail where they walked down into the Canyon.

Perry Stufflebeam gave an illustrated travelogue at the Feb. 21, 1958 meeting of the Mineralogical Society of Arizona. Shown in color were Indian ceremonials at Grand Canyon Lodge, Geological formations of Grand Canyon, Monument Valley, Canyon de Chelly, Petrified Forest, Painted Desert; Marineland at San Diego, and the Gemorama at Los Angeles (1957).

Interesting highlights were; a rugged spot in Monument Valley where Arizona's only pink prickley pear cactus grows. The blossoms of all others in Arizona are yellow. In Canyon de Chelly, the winter hogans of the Navajos and their summer homes. In summer they live mostly outdoors with a brush portico for shade. It's a wonderful way to live in Arizona.

Perry displayed beautiful specimens of agate and petrified wood collected on the trip.

The Feb. field trip was taken by Phoenix's three societies, Maricopa Lapidary, AiResearch, and MSOA, to a vicinity near the military test station near Yuma. Occupants of 40 cars camped overnight at Lake Martinez. Specimens found were plume agate, petrified wood, fossils, blue chalcedony, fire agate, carnelian. At Castle Dome mine they found wulfenite and fluorite.

Ida Smith, Cor. Secy.
2238 East McDowell,
Phoenix, Arizona

Phoenix Gem and Mineral Show

If Atahuallpa, last chief of the Incas, could have visited the 1958 Phoenix Gem and Mineral Show, he would have seen 20,000 persons viewing his special emerald in the beautiful Crown of the Andes.

Atahuallpa was cruelly slain by the conquistadores in 1533, when the world's doubtful glories of conquest were steeped in greed of acquisition and broken promises.

During 1593 to 1599, citizens of Popayan, Colombia, South America, many of them of the nobility of Spain, fashioned the Crown of Our Lady of the Andes, from gold and emeralds horded since the conquest. The largest emerald was that of Atahuallpa. The fabulous crown was a gift to the Blessed Mother in gratitude for the town's escape from a plague that swept the country. Fashioned in the fifteenth century with the crude tools of the day, its exquisite workmanship is still one of the world's marvels.

The crown was purchased eventually from the Catholic Church and today is owned by the Crown of the Andes, Inc., a syndicate in New York City. It is valued at 4½ million, and contains the largest collection of emeralds in the world.

The crown was shipped by air, under armed guard, to the Phoenix Show; sponsored by the Mineralogical Society of Arizona, Maricopa Lapidary Society and AiResearch Lapidary Club.

A preview of the crown was held at a breakfast at Westward Ho Hotel in Phoenix for dignitaries of the city, church, and committee members of the show.

Upon leaving Phoenix, the crown will go to the Dallas, Texas, Garden Show, and will arrive home sometime in April.

In keeping with the theme, "Jewels of the Ancients", exquisite old jewelry and carvings were exhibited by the William Rockhill Nelson Art Gallery of Kansas City and Smithsonian Institute of Washington D.C. Pre-Inca Peruvian artifacts, showing a highly developed civilization, were shown by C. Richard Leroy of Mesa, Arizona. Ross Cook, Rolling Hills, Calif. displayed old gold jewelry and a fabulous gold nugget collection.

Rosenzweigs of Phoenix displayed a collection of the famous Chatham cultured emeralds. These are natural emeralds grown by atoms and molecules. Mr. Chatham provides the necessary environment in his laboratory for their growth; the same as that provided by Nature deep in the earth.

Members of Maricopa and AiResearch Lapidary Societies and guest lapidaries contributed distinctive modern jewelry, polished stones and carvings. Members of Mineralogical Society of Arizona and guest mineralogists displayed "flower garden" crystals of the mineral world. 25 dealers did a rousing business helping new rockhounds start their collections.

Other unusual exhibits included a natural "Nativity scene" in tube agate, by Domer L. Howard, Oklahoma City; with an oil painting of same by Ila McAfee, Taos, New Mexico. "Fulgurites While You Wait" by Jim

O'Neal. Jim saw these made by lightning in the Bradshaw Mountains. A carving of Mary in gem stone, with a silver and emerald crown, by Wilma Cowell. Dorothy Craig and the A. F. Dosse's Woodruff Trophy displays were there. Also the R. J. Laughlin's rare Wyoming stalactitic agate, jade with quartz crystals, carnelian wood casts, and Mediterranean gem coral. Curious Eden Valley limb casts, Henry Arp and Dick Edwards, Wyoming. Rare miniature plant fossils, Sam and Ruth Kirkby, Riverside, Calif. Complete story of crystallography, exhibit planned and executed by 19 year old Richard L. Atkinson, Glendale, Arizona. Probably the most valuable agate nodule in the world, The Hooded Owl, by T. B. Williams, Triangle Rock Shop, Lordsburg, New Mexico. The owl is not for sale at any price. Beautiful copper tooling, Dorothy Jones, Phoenix. And an exquisite rock church with agate windows and a staurolite cross, made and exhibited by Moulton B. Smith, Phoenix. All departments had continuous demonstrations.

Speaking of gems; precious, semiprecious and cultured; Pat Hampton of Phoenix, says, "Any cotton-pickin' rockhound can own the real thing—by finding, trade, or with legal Uncle Sam wampum.

Her case displayed fine examples of these.

The Rocky Mountain Federation Convention was held in conjuction with the show. New officers elected were, Domer L. Howard, Oklahoma Gem and Mineral Society, president. Ruth Broderson, Wichita Gem and Mineral Society, vice president. Norman E. Flaigg, Oklahoma Gem and Mineral Society, secretary. Lois Heister, Albuquerque Gem and Mineral Society, treasurer. Executive Committee: Donald Barnes, So. Dakota; James F. Hurlburt, Denver; and Katie Trapnell, Phoenix.

The next Rocky Mountain Federation Convention will be held in Wichita, Kansas.

This was Arizona's largest gem and mineral show. Among the 20,000 visitors, 33 states and the D. of C. were represented. Milford Benham, MSOA, overall chairman; Myron Gress, chairman from Maricopa Lapidary Society; and Rolland Klapprott, chairman from AiResearch Lapidary Club; and all their committees deserve a world of credit. It was the third consecutive year the show has been sponsored by the three Phoenix societies. Each year they have had to acquire a larger building.

The outstanding cooperation shown by the sponsoring societies was equaled only by the understanding today of all the events, both tragic and magnificent, that took place in the history of the Emerald Crown of the Andes.

Ida Smith, For Show Committee
2238 East McDowell,
Phoenix, Arizona

California

California Federation Convention Show To Be Held In the Commercial Building on National Orange Show Grounds at San Bernardino, California on June 20, 21 and 22nd, 1958

The California Federation's "GEM AND MINERAL FIESTA" is an appropriate title with its setting for the 1958 Annual Convention Show to be held in San Bernardino, California. The Orange Belt Mineralogical Society will be host, and has its wheels spinning into high-gear for what promises to be an outstanding show that will attract people and collectors nation-wide.

George Nash is GENERAL SHOW CHAIRMAN, and is also head of the Executive Committee, consisting of the following members:

Jack Klein, Federation President of Barstow, California.

Erna Clark, Special Feature Displays Chairman of Redlands, California.

Everett Gilmore, Chairman Field Trips, Riverside, California.

Charles Cross, Chairman Commercial Exhibits, San Bernardino, California.

Major Charles Kennedy, Publicity Assistant to George Tyler, Chairman of Publicity.

This year there will be a color theme of blue and gold, which are the official Federation colors.

Each day there will be a special "recognition day" during the show. This first day: "Kenneth Garner Memorial Day"—the 2nd day, "Charles Knowlton Day"—and the 3rd day, "President and Past Presidents of the Calif. Federation and of the Orange Belt Mineralogical Society."

This year the show is taking on an international aspect. Already a dealer from South Africa has signed up and promises to bring eighteen varieties of raw gem materials along with his Special Feature Dis-

play, of jewelry, artifacts and things South African style.

Many other outstanding special features have been lined up, some of which are as follows:

G. Keith Hodson of Scottsdale, Arizona will display his $50,000.00 fire opal. It was discovered in the Virgin Valley opal fields of Nevada.

Charles Reynolds of Escondido, California, will display a kunzite crystal that is claimed to be the largest in the world so far as is known. It weighs slightly over 5 lbs-1 oz, and is 11 inches long. It was discovered near Pala, Calif. Mr. Reynolds will also show some very fine quality faceted kunzite, one of them weighing over 150 carats.

The Hubert "Hub" Dafoes of Oakland, California, will display for the first time their very outstanding collection of agatized fossil coral geodes, collected in Florida. These have all been cut and polished by "Hub," revealing an unusual assortment of beautiful colors and shapes. They will also display their very beautiful "shadow bow" of "OLD LAVENDER AND LACE", which is made up into a picturesque piece of art consisting of amethyst geodes, driftwood and lace.

Erna Clark, of Redlands, California, will display to the public for the first time her outstanding specimen of Iris "rainbow" Agate, which is named, "THE FAIRY TREE OF RAINBOWS" which will be supplemented with a large oil painting of it while on exhibition. An artist of Escondido, Rosemary Pierce, has captured the ethereal beauty of the specimen with oils on canvas.

Elmer Rapp of 29 Palms will display a table inlaid with beautiful semi-precious stones, all from nearby desert regions and includes some "scenics" too.

Many other fine exhibits too numerous to mention at this time are worthwhile for people from near and far to plan to see by attending this great California Convention Show.

Erna Clark,
Special Features Chairman
611 Cypress Circle
Redlands, Calif.

OUR TRIP INTO MEXICO

By CHAS. S. KNOWLTON

143 N. Acacia, Fullerton, Calif.

(Mr. Knowlton is a sand collector, hence his references to sand.—Editor)

My sister and I recently had a most enjoyable trip well into Mexico. We entered at Juarez, leaving our car in El Paso, Texas, and going with friends from there, and of course returning. El Paso is on the north bank of the Rio Grande, the river which separates U.S. from Mexico. Juarez is on the south bank. These friends live in Chihuahua, Mexico, and they are quite familiar with most of the area that we traversed, so we saw most of the interesting places as far south as Puebla, which is the Capitol of the Mexican Onyx business.

I did not get as many sand samples as I had hoped, and not even one garnet sand. As I am sending several duplicate parcels I may be excused if I type several duplicate description papers. It may well be that some of it you already have, but that may be excused.

Pencilled on the envelope is an identification word that will correspond to the typed description of the enclosed sand.

Juarez, Mexico. About 35 miles south of Juarez, is a large patch of blow sand, some 6 to 7 miles wide and 35 to 40 miles long. The Mexicans call it SAMALAYAUCA, I do not know what that means, but it looks sandy and one can readily imagine what happens when the wind blows as it usually does. No wind either going or coming, fortunately.

(This is a very fine grained, pale brownish sand consisting chiefly of quartz (colorless, brownish, smoky) with a small amount of brownish to white feldspar, and a very tiny amount of black magnetite.—Editor).

I was greatly interested in the Mexican onyx, that I saw in Puebla. I tried to learn how the onyx was formed, but strange to say, there was no literature to be found. While I am in no sense a

geologist I am inclined to think that it must have been deposited in fresh water in early days. The deposits are so great and wide spread, both in Mexico and the U.S., that it would seem that more information should be found. In the large book stores in Mexico City there were books that told where it has been found, but not a word about how it was formed. Nor have I been able to find any U.S. literature about it, only localities where it has been found.

Fortin de las Flores, Mexico. At Fortin, Cortez built the first fort that the Spaniards built in Mexico. But as the natives were peaceful there was no need for it as a fort. As it is located in the tropics and they do have much rain in that particular area much of the vegetation is tropical so the name was changed to Fortin de las Flores. Some wealthy Mexican acquired the place and rebuilt it into a classy hotel and it is surrounded with tropical trees and plants. In one area they raise coffee, mangos, papayas and other tropical fruits and many thousands of gardenia bushes. At the hotel is a large swimming pool that is lined with blue tile and every morning thousands of gardenia blossoms are thrown into the water, giving it an unusual effect, and many people take advantage of it. The flowers are replaced every morning. Flowing thru the orchards was a small branch of Rio Blanco, which was quite low at the time. I thought I would get some sand there, but as the fall is so great, very little sand can settle and the best that I could do was to scrape a tiny amount of it.

(This is a dark gray medium grained sand consisting of smoky quartz and black magnetite.–Editor).

Veracruz, Mexico. We made a side trip to Veracruz, which none of us had visited. Veracruz is Mexico's largest seaport and as there are miles of seawalls one has to get outside the city proper to get to the beach. There is nothing except locality interest in the sand, which is the finest sea sand that I have ever seen.

(This is a very fine grained, dark gray sand. Consists chiefly of quartz (colorless to smoky) and sea shells (white, brown), with very small amounts of black magnetite and silvery muscovite. Veracruz is on the Gulf of Mexico–Editor).

We returned to El Paso, picked up our car and headed for home, stopping at the little town of Anthony, New Mexico, for a sand sample.

Anthony, Texas-New Mexico. As one drives northwest from El Paso he goes thru Anthony and the post office building stands astride the state line. About a mile west of the town the Rio Grande flows, if there is water in it. As there was a bit of water on the near side I had to walk across a bridge and come back to near the middle to find some clean sand.

(This is a fine grained, gray sand consisting chiefly of quartz (colorless, smoky, brownish, reddish) with small amounts of gravish feldspar and tiny amounts of black magnetite and silvery muscovite.–Editor).

Collector's Corner

For the special benefit of collectors who may be living in areas far removed from other collectors we have opened this feature. In this corner, a collector may have his name and address listed for the purpose that other collectors may write him in the hope that through correspondence, exchange of ideas and specimens, new friendships may be formed. Listings are free.

George Powers, 1126 E. 3rd Ave.,
Mesa, Arizona

Dwight Weber, 547 W. Mendocino St.,
Altadena, Calif.

Mrs. Glenn W. Armstrong, Hwy. 66,
P.O. Box 34, Newberry, Calif.

Robert Gallant Jr. (16 years),
Box 32, Moodus, Conn.

Marjorie H. Nichols, 106 Grove St., Putnam, Conn.

Mrs. Bertha Lawrence, 1137 N.W. 58 Terrace, Miami, Fla.

A/1c Ralph Wayman, 3554 C.C.J. (Supp). Box 130, Moody AFB, Voldosta, Ga.

Dave Strief, 3217 John Lynde Road, Des Moines 12, Iowa

Mrs. Walter J. Broderson, 657 McLean Blvd. N.W., Wichita 12, Kans.

Susanna Jacob (10 years), Box 145, South China, Maine

Harold P. Trefethen, 98 Allen Ave., Waban, Mass.

Walter Kalata, 100 Shamrock St., Ironwood, Mich.

Forrest Shouldice, 229 W. Ayer St., Ironwood, Mich.

Michael F. Kidzus, 23 Ravine Drive, Matawan, N.J.

Mike Kaas, 18 N. Mansfield Ave., Margate City, N.J.

Steven Stieglitz (14 years), 160 Belmont Ave., Jersey City 4, N.J.

Mr. & Mrs. Walter F. Kowal, R.F.D. 2, Goshen, New York

Harold Trefethen (17 years), 10 Windsor Lane, Scarsdale, N.Y.

Adrian Labuz, 12 Sherrill Lane, New Hartford, New York

Sandra Jo Parsons (13 years), Box 34, Rt. 1, Thurmond, N.C.

Nancy Ray (14½ years), 3017 Banbury Rd., Raleigh, N.C.

Mr. & Mrs. Harold Heeley, 16317 Corkhill Rd., Maple Heights, Ohio

Richard C. Haefner, 217 Nevin St., Lancaster, Pa.

Bob Snyder, 1916 Rudy Road, Harrisburg, Pa.

John Speer, 1605 College Ave., Anderson, S.C.

C. A. Hull, Box 30, Keystone Route, Rapid City, S.D.

Charles Speltz, 1917 Foster, Memphis 14, Tenn.

Harry Hollingsworth, 901 Country Club Rd., Borger, Texas

J. B. Matthews, 1111 N. Polk, Amarillo, Texas

Mike Pitzer (16 years), 605 Zelwood, Tyler, Texas

J. E. Rawles & Jimmie, 51 Green Oaks Rd., Newport News, Va.

Sallie Ann Potts (14 years), P.O. Box 283, Parkersburg, W. Va.

John Potts II (12 years), P.O. Box 283, Parkersburg, W. Va.

Linda McCoy (14 years), 823 28th St., Vienna, W. Va.

Elizabeth Gibbs (16 years), 854 Fairview Ave., Parkersburg, W. Va.

Mr. & Mrs. C. O. Garriott, Box 1, Sand Draw, Wyo.

John Maraldo, 1856 Converse, Cheyenne, Wyo.

John W. Dryden, Star Route, Palmer, Alaska.

Fred Samuels, Dragones 108, Havana, Cuba

H. A. Potts (16 years), 29 Bedford St., East Fremantle, Western Australia, Australia

VISITING ROCKHOUNDS WELCOME

The following subscribers would be delighted to have rockhounds call on them when passing through their cities. If any one else wants his name added to the list, just let us know.

Ken Dor Rock Roost,
419 Sutter Ave., Modesto, Calif.

Mrs. Glenn W. Armstrong,
Hwy. "66," P.O. Box 34,
Newberry, Calif.

Marjorie H. Nichols,
106 Grove St., Putnam, Conn.

Dorothy Fuldner,
536 Wright Drive, Lake Worth, Fla.

Mrs. Bertha Lawrence, 1137 N.W.
58 Terrace, Miami, Fla.

Rex & Lela Hile, 238 So.
Richmond, Wichita 13, Kans.

Mrs. Walter J. Broderson, 657 McLean
Blvd. N.W., Wichita 12, Kans.

Ben E. Clement, Sturgis Rd. No.,
Marion, Ky.

Joseph Z. Maurice, Rear of 292 N.
Main St., Leominster, Mass.

Hjalmer Bergman,
Mineral Rock Gardens, Ely, Minn.

B. E. Schoneman, 610 Kness Ave.,
Luverne, Minn.

Michael F. Kidzus, 23 Ravine Drive,
Matawan, N.J.

Elmer B. Rowley, 214 Ridge St.,
Glens Falls, N.Y.

Joseph Skaritza, Seneca Mobile
Manor, Rt. 5, West of Utica, N.Y.

Lewis F. Valachovic, 110 Burton St.,
Johnstown, N.Y.

Donald Arrowood, Rt. 2,
Box 245, Rutherfordton, N.C.

Mrs. Joy Hintz, Science Hall
(Mineral Museum), Heidelberg
College, Tiffin, Ohio

Richard C. Haefner, 217 Nevin St.,
Lancaster, Pa.

C. A. Thomas, Penn State Univ. Lab.,
Cedarcroft Rd., Kennett Square, Pa.

Paul H. Benson, Jr., Radio Sta. WJMX,
U.S. 52 No., Florence, S.C.
(Phone 6351 and 2-2943)

John Speer, 1605 College Ave.,
Anderson, S.C.

C. A. Hull, 12½ Mi. So. on U.S. 16 to
Mt. Rushmore, Rapid City, S.D.

Charles Speltz, 1917 Foster,
Memphis, 14, Tenn.

William M. Johnson, RFD 6,
Knoxville, Tenn.

H. V. Williams, 137 E. Walker St.,
Breckenridge, Texas

J. B. Matthews, 1111 N. Polk,
Amarillo, Texas

Mike Pitzer (16 years),
605 Zelwood, Tyler, Texas

Celia M. Hess, Old Village Resort,
3 Mi. west of Rhinelander, Wisc.

Mr. & Mrs. C. O. Garriott,
Box 1, Sand Draw, Wyo.

John Maraldo, 1856 Converse,
Cheyenne, Wyo.

John W. Edwards, Wyebridge,
Ont., Canada

Peter Vollmering, 56 Kenneth Ave.,
Toronto 9, Ont., Canada

Pauline & Bill Learned, P.O. Box 566,
Lago Colony, Aruba, Dutch West Indies

PUBLICATIONS RECENTLY RECEIVED

The Gem Materials Data Book

By Charles J. Parsons, C.G., F.G.A., and Edward J. Soukup, C.G., F.G.A.

Perhaps the greatest desire of gem hobbyists is to identify materials. Here is a new "tool" that will find a ready market to hobbyists, gemologists and jewelers. It is the most comprehensive and complete assembly of gem material data ever offered. It would require reference to at least seven different sources PLUS access to the authors' original research data (never before published) to get the information contained in this one convenient "package."

Here you will find all known species of gem materials together with group, variety, alternate and false names. No matter what the characteristic you need—color, transparency, luster, refractive index, birefringence, crystal system, optic character, dispersion, pleochroism, specific gravity, hardness, characteristic inclusions, cleavage, fracture, habit, or special characteristics of varieties—you can find them all in the specially designed "tool." It's all cross-referenced, too.

You will also find the most useful characteristics in alphabetical or numerical order (or both)—complete with *ranges* of refractive index and specific gravity.

In no other source can you get so much easily found information in such *convenient* and *practically useful form*.

This new reference will, we feel, fill a need for jewelers and gemologists who require the information it contains. For the first time practically all of the fund of data pertaining to gem materials has been put between the covers of a single book. Both of the authors are practical gemologists, and the various tables and the layout were suggested by the practical needs of persons working in this field.

This new book is 9x12 inches in size, contains 35 pages, and costs only $2.00.

Published by Gems & Minerals, P.O. Box 687, Mentone, Calif.

Mineral Industries Bulletin

Golden, Colo.—A new publication covering the field of Colorado's minerals has been published by the Colorado School of Mines. Called "Mineral Industries Bulletin," the bi-monthly publication will deal with important minerals native to Colorado and their respective uses in industry.

The first issue of "Mineral Industries Bulletin" treats the metallic element Beryllium and was written by Donald R. Williamson, project engineer at the Colorado School of Mines Research Foundation. This new series of bulletins is a joint venture by the Colorado School of Mines and the Research Foundation. The "Mineral Industries Bulletin" (which will be sent free of charge to those people who request it from the Department of Publications, the Colorado School of Mines, Golden, Colo.) is intended to supply current information to those people interested in the mineral industry potential of the State of Colorado. They will contain articles and statistics regarding the elements of Colorado's geology and mineral resources, mining operations, metal markets, production statistics, economics and other aspects of Colorado's mineral industries.

The new issue contains classification charts, geological surveys of occurrences, extractive metallurgy process explanations, a map of Colorado which designates precambrian pegmatite districts and a selected bibliography of articles pertaining to beryllium. Beryllium, the major use of which now is in the production of alloys, occurs as a major constituent in some of Colorado's minerals.

Earth for the Layman

By Mark W. Pangborn, Jr. Report No. 2, Second Edition.

A selected, annotated bibliography of the earth sciences, this Report No. 2 is designed to help teacher, librarian, student, hobbyist, and the nature-loving public to find suitable reading material in the fields of geology, mining, oil and map-making.

This bibliography reflects the Institute's serious effort to bring geology to the public's attention, and particularly its interest in pointing children and young people towards science as a career. 6x9, 68 pages, $1.00.

Order from the American Geological Institute, 2101 Constitution Avenue, N.W., Washington 25, D.C.

Studies in Foraminifera

By Alfred R. Loeblich, Jr., and Collaborators: Helen Tappan, J. P. Beckman, Hans M. Bolli, Eugenia Montanaro Gallitelli, J. C. Troelsen.

This publication is of special value to micropaleontologists (those interested in minute fossils). It is 9½x11¾ inches in size and contains 323 pages, 74 plates.

Published as U.S. National Museum Bulletin 215.

For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C. Price $3.25 (paper).

Lead and Zinc in California

By J. Grant Goodwin

An intensely interesting report on the lead and zinc deposits, minerals found in them, and a list of mines by counties—all in California—pp. 353-724 (map in pocket).

Issued as Vol. 53 (Nos. 3 and 4), July-October 1957 by the Division of Mines, Ferry Building, San Francisco, Calif. Price $2.00

Maine Mines and Minerals

Vol. I—Western Maine.
By Philip Morrill and others.

Maine continues in popularity as a mineral state and so it is a pleasure to announce the appearance of another book devoted to Maine Mines and Minerals. Its author is Philip Morrill who insists that credit is due to a number of people for the successful completion of this new book. The localities are listed alphabetically from Acton to York (pp. 1-55); minerals (with their localities) are listed alphabetically (pp. 56-61); 20 maps (pp. 62-80).

This very interesting book, 5½x8½ inches in size, 80 pages, is for sale by the Dillingham Natural History Museum, Naples, Maine, and costs only $1.95.

Report of Committee on Standardization of Exhibits and Judging

With so many conventions and mineral shows covering the country each year, each with its multitude of exhibits and displays, it is only natural that there would be a wide variation in the type of exhibits and their judging.

The American Federation of Mineralogical Societies has prepared a report covering the standardization of exhibits and judging. This is a 24-page, 5½x8½-inch publication and copies (if still available) may be obtained from the chairman of the committee—Arthur L. Flagg, Box 2345, Phoenix, Ariz.

Vermont Publications

The State of Vermont has issued a one-page price list featuring geological publications available. Copies of the price list are free and may be obtained from Vermont State Library, Montpelier, Vt.

Dealers Price Lists

Eberbach—A new catalog showing laboratory equipment and apparatus manufactured by Eberbach Corporation is now available. This 43-page book contains over 250 items, and is free upon request from Eberbach Corporation, P.O. Box 63, Ann Arbor, Mich.

Everett—An eight-page price list featuring minerals, fossils, and jewelry is available from Everett's Lapidary Shop, 2941 N. 65th, Lincoln 5, Nebr. As the capitol of Nebraska is in Lincoln, Everett's slogan is appropriate, "Capitol City's First Rock Shop." The price list is free.

Prospector's Shop—This enterprising company claims to have the largest mineral and gem department in New Mexico (their Original Curio Store department is the oldest in the U.S.). A seven-page price list covering minerals, lapidary equipment, ultraviolet lamp (two sheets in color), has been issued by Prospector's Shop, 201 W. San Francisco St., Santa Fe, N. Mex. Send for it—it's free!

Specimen Minerals—A 43-page price list covering minerals, gem cutting materials, rocks, books, fossils, etc.—all from Australia. A map, showing location of chief Australian localities, is a feature of the price list which is issued free by Specimen Minerals (Australia) Ltd., 57 Todville St., Woodville West, South Australia.

Wiley—A general catalog on books covering minerals, science, technology, and business will be mailed free on request by John Wiley & Sons, Inc., 440 Fourth Ave., New York 16, N.Y.

Williams—An eight-page price list featuring some new mineral arrivals was issued in April 1958 by Scott J. Williams, 2346 Scottsdale Road, Scottsdale, Ariz.

INFORMATION WANTED BY READERS

Growing crystals artificially

Can you tell me where I can get information on growing crystals artificially?

E. J. Gelston
Torrance, Pa.

About the only source of information known to us is that which appears in David E. Jensen's "My hobby is collecting rocks and minerals," pp. 78-79. This book was reviewed on p. 54, Jan.-Feb. 1956, R&M.

You may purchase a copy from the publishers, Hart Publishing Co., 670 5th Ave., New York 19, N.Y., or from Ward's Natural Science Establishment, Inc., P.O. Box 1712, Rochester 3, N.Y. Price $2.95.

Importing minerals from Spain!

I recently received a mineral price list from Juan Montal in Spain. There are two things I would like to know before ordering. Perhaps you can help me.

1—Are his minerals post paid?

2—Do you know what the duty rate is on minerals?

Rev. C. B. Howells
1679 Parkwood Rd.
Lakewood 7, Ohio

We have received many minerals from Mr. Montal. They were all sent post paid and we never had to pay any duty.

Can't tell quartz from feldspar!

Enclosed renewal to R&M for another year. So far I can't even tell quartz from feldspar but I keep reading.

Albert C. Gifford
Box 62
Union Springs, N.Y.

Easiest way to tell them apart is to break a few with a heavy hammer. Quartz will always shatter like glass (with sharp jagged edges and no smooth faces). Feldspar will shatter to some extent but its edges are not sharp and jagged and it will have at least one smooth face.

When a collector breaks many pieces of quartz he almost always cut his fingers on the sharp edges of the quartz—never on the feldspar, *unless he is very careless.*

Wants a rock trimmer

There is some sort of a device used by some rock hounds to split rocks without fracturing them. What is this device and where can I purchase it?

James Neal
12 New St.
Mount Joy, Penn.

You must have in mind a rock trimmer. It's quite expensive for the average rock hound but it can be purchased from Ward's Natural Science Est., Inc., P.O. Box 1712, Rochester 3, N.Y.

A new use for minerals!

Editor R&M:

My neighbor has a six-year-old son who likes to look over my mineral collection. About three weeks ago I gave him a broken pyrite xl.

Last week the boy brought his 10-year-old cousin to look at the rocks, as they call them. While I was talking to his mother, the boys disappeared. I looked out the back door and saw them in a huddle on the back porch.

The next day the boy's mother called up to tell me that her boy took the rocks I gave him to bed with him. I never gave him any rocks but on checking some specimens I had out back, soon knew where he got them.

In the meantime the boys were making a snow man; they used green feldspar for the eyes, black hornblende for the nose and red stained quartz for the mouth—(my specimens!).

A few days later the older boy's mother called up saying, "Don't show my boy any more of your rocks, he was digging up our driveway looking for some gold like you gave his cousin."

When I see this boy I will have to give him a piece of pyrite so he won't dig up someone else's driveway, maybe mine, or else I may be minus a nice pyrite xl I have on the pack mule I had made of ceramic, and is on display with my collection.

J. Kuhhorn
Jan. 20, 1958 Germantown, N.Y.

WITH OUR ADVERTISERS

Conducted by James N. Bourne
c/o Rocks and Minerals. Box 29
Peekskill, N. Y.

Advertisers are cordially invited to submit News Items to this Department

Many rockhounds who visit Atlantic City, N.J. this summer will have an opportunity also to visit the Boardwalk Rock & Shell Shop, 2205 Boardwalk, Atlantic City, N.J. Its proprietor, Marvin I. Hume, formerly advertised with R&M from St. Louis, Mo. A little note from Mr. Hume reads as follows:

"The Boardwalk Rock & Shell Shop is now open and we will handle a complete line of lapidary equipment, minerals, crystals, jewelry and other related items. We will also have a nice stock of shell items and novelties from all over the world."

"As I have quite a heavy inventory of stock on hand, and expect to get more in constantly, I will offer real values and deal on a fair basis with everyone, guaranteeing all items that are sold."

Note: Mr. Hume will be pleased to have rockhounds call upon him as visitors are welcome and he will do his best to serve your needs. We wish Mr. Hume success in his new shop and be sure to drop him a line or two or even better yet, drop in and look over his Boardwalk Rock & Shell Shop in Atlantic City, N.J.

Another item we would like to make mention of is from the Shipley's Mineral House, Gem Village, Bayfield, Colo., which reads as follows:

"FOR THE LAPIDARY: Sawed slabs in both native and imported cutting materials, blank jewelry, ready to mount your stones therein, comes in sterling silver, gold filled, karat gold, imported 'fine silver' in filigrees and hand hammered. Several American jewelry lines available.

"FOR THE BUTTON COLLECTOR: We manufacture gem stone buttons for the dress trade and cater to button collectors by selecting choice buttons and putting them on individual cards with full data and other historical information. These buttons consist of gem stones from world wide sources, mounted in gold, silver and nickel. Other buttons obtainable are woods, both native and imported, carved and inlayed; Indian buttons; Birthstone buttons; hand painted flowers on wood; hot iron western branded buttons; metals in copper, silver engraved steel and 'fools gold'; and engraved ricolite. Write for an approval selection or free button lists."

"FOR THE BEGINNER, STUDENT OR CHILD: We send small specimens of minerals from ½ to 2½ inches in size (depending on material) in assorted selections giving a variety of minerals to choose from. Each rock comes identified as to name, location, etc. Assortments may be obtained in 25¢, or the 50¢ price range or in a mixed selection of the two."

Note: Be sure to write the Shipley's for your needs as mentioned above. Their mailing address is Shipley's Mineral House, Gem Village, P.O. Box 232, Bayfield, Colo.

We would like to print a letter received by us recently by Mrs. Arthur J. Gude, 3rd, Box 374, Golden, Colo. The letter reads as follows:

Dear Mr. Bourne:

"You have certainly done well by us, and it has been a pleasure and a profit to advertise with R&M.

"I wish we could continue advertising with you, but we are leaving for overseas within a few months, and I am leaving the models (crystals) both the 15 for $1.00 and the 111 for $5.00, with Polycrystal Book Service. 333 Jay Street, Brooklyn 1, N.Y., and with the Publica-

tions Department of the Denver Museum of Natural History, City Park, Denver 6, Colorado.

"You may be interested to know that SCIENCE IN ACTION—Explorers of Tomorrow—which is a TV show issuing from the California Academy of Sciences—is furthering the Gude 3-D (crystal) models by giving away copies of the Construction Kits to promising students in science. So many young people are using the models for science and math classes in high school.

"When we return from overseas, you may be sure we shall continue to advertise with ROCKS AND MINERALS. You'd be surprised at the results!"

Note: From above and similiar letters received from time to time we like to point out the value of our advertisers forwarding news items to this column for insertion as they often will bring in additional orders and inquiries. Our readers are interested in your acquisitions and purchases of certain minerals, your expansion of business, the opening of new facilities and departments of your place of business, etc. Therefore, don't confine this information to yourselves as we are glad to pass this information on to our readers to everyone's advantage.

B.E. Clement, P.O. Box 69, Marion, Ky., will resume advertising when he fully recovers from a serious operation undergone recently he relates to us. We'll be looking forward to hearing from you again, Mr. Clement, and in the meantime wish you complete recovery.

We are again pleased to hear from Joseph P. Stachura, 8 Upton St., Millbury, Mass., who advertises regularly in R&M. Mr. Stachura, by the way, has had a new addition to his family, a little girl born before Christmas that he is quite fond of. Joe relates that she sleeps days and stays awake nights and is hoping she reverses that procedure soon. We would also like to pass on this little item of interest from Mr. Stachura which reads as follows:

"We have quite a few specimens of fulgurites (earth fused by lightning) from a recent occurrence at Northboro, Mass. Specimens from 35¢ to $5.00 and up depending on formation and size. Also (2) superb museum pieces on hand." We have seen a specimen of this occurrence and thought it to be very attractive and unusual. One or more of these specimens will make a nice addition to one's collection. Mr. Stachura also features lapidary equipment, custom made jewelry, custom slabbing, and many mineral specimens. Mr. Stachura will give prompt attention to all orders received, so drop him a line today and place your order.

Another of our advertisers, Bob Daniel, Proprietor of Natural Gems, 795 E. Currahee St., Toccoa, Ga. is expanding his place of business. A note from Mr. Daniel reads as follows:

"I moved into a larger section of this building, so the location is the same, but have more than twice as much room for display and working area. We still lack some things yet to be finished with the setting up the shop, but it is moving along fairly well.

"The ad on the staurolite crystals you ran did well. We almost sold out of that item as the result. Have been very pleased in all results from the ads R&M have run for me and will offer something a little different or better as time goes on. Thanks for all."

Note: Glad to hear from you, Bob, and may your ads continue to pull well in R&M. Take a look at Natural Gems' (2) classified ads in this issue for some good buys, and order from their mailing address of P.O. Box 64-B, Toccoa, Ga.

From Harvey R. Shull, 1516 South Market, Oskaloosa, Iowa, comes an item relative to "fluorescing woods" which should prove of great interest to readers. Here it is:

"How I happened to discover fluorescing woods: In years gone by I did considerable wood carving and saved many small samples of fine woods. Last August I was looking thru a box of these wood items and flashed my 'long wave' lamp on them. Since that time I have

been searching and examining over one hundred tree species, and now have over twenty species which fluoresce beautifully. Several imported. The surprising thing is the unique combination of spectacular color. When properly 'fashioned' and 'finished' a wide spectrum of colors abound. From pale almond tones and citron, to tawny browns, yellow, purple, orange, vermilion, lemon green, blue and gray. The grain patterns of no two trees are ever exactly alike. This interesting individualism is one of the most appealing factors.

"Like a beautiful mineral specimen, pride, satisfaction and even inspiration can be enjoyed from many of these spectacular fluorescing natural wood items. They are not 'petrified' but genuine tree species right from the forests. The real thing. As time permits I am carving and fashioning totum poles, animal figures, lamp bases, ash trays etc. from the many fluorescing woods that I have.

"Look up my ads in the classified section of R&M this issue and be the first to obtain some fine fluorescing wood specimens for your collection."

Note: we have seen quite a few samples of Mr. Shull's handiwork in the carving of these fine wood specimens and they fluoresce many colors of the rainbow beautifully. We suggest making purchase of some of these specimens soon as possible while they last, as they should be very popular with many readers looking for the unusual in regards to fluorescing wood.

Earl Smith of Geode Industries, 106 W. Main St., New London, Iowa has notified us as to their expansion of facilities with a new shipping dept. and also added 1500 ft. additional floor space.

"We are at work on a new type of specimen mount with which the average rockhound and collector can uniformly and easily mount his specimens for display. New mounts will come in do-it-yourself kit forms."

Note: Geode Industries are direct distributors for Estwing Mfg. Co., and are advertising a new "Cushion-Grip Hammer" that's a beauty. Take note of their ad this issue and get yourself one.

From Grant G. Thompson of the Ottawa Valley Gem Shop, Box 66, Billings, Ottawa, Ont. Canada, who will be advertising regularly in R&M beginning this issue, comes the following item:

"We have long felt a need for a rock shop in Eastern Canada. We know there is at least one shop in B.C. and we know of one in Nova Scotia. But these are likely to be insufficient to serve the needs of the Canadian rockhound.

"Our orders have so far just about balanced out in quantity between Eastern Canada and Western Canada. Our aim is to be the largest and most complete lapidary supply house in Canada. With the thousands and thousands of visitors that will be coming to view the magnificent and marvelous St. Lawrence Seaway Development this summer, we feel that any rockhounds in this crowd will welcome the chance to slip into Canada's capital to talk Canadian-Rock-Shop."

Note: We are pleased to have the Ottawa Valley Gem Shop advertise in R&M and may their aim to be the largest and most complete lapidary supply house in Canada come to full realization in due time.

From the Thurstons of Morningdale (Town of Boylston) comes the following:

"We wish to thank all our friends who have been in correspondence during the past year, and invite them to call at their new mineral shop this summer. There are many beautiful specimens on the shelves that are never listed in the catalog due to lack of space and time. New material arrives almost daily from all over the United States and from foreign countries."

"Please bring your good swapping material or sales material. We can always use new material. From the new Mass. Turnpike leave at the Millbury-Grafton exit. Take route 140 north to route 70, then take 70 south 1½ miles and inquire at Shell gas station or Post Office."

Collecting Minerals

(Continued from page 215)

its mount for closer inspection when desired.

There are numerous advantages to collecting in the manner described. Nearly 1,000 minerals are kept in a space 12 x 24 x 44 inches. Moving your collection from one home to another is a comparatively simple matter. A little cotton around the delicate minerals and some crushed newspaper between the boxes in the cabinet, a covering of cardboard from old cartons securely fastened around the cabinet are all that is necessary.

Recommendation

In addition to what has been said there is one recommendation which should be made, and it is not new. ROCKS AND MINERALS and every experienced collector will tell you that quality is much more important than quantity. A choice specimen pays dividends in two ways: It gives its owner great satisfaction and pleasure, and such a specimen will always have a high intrinsic value. It is an investment.